FINAL REPORT

535 E. Montecito Street, "Los Portales" Project Traffic and Parking Impact Study City of Santa Barbara

Prepared for

City of Santa Barbara Community Development Department

Prepared by

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INTRODUCTION

This report summarizes the results of a traffic impact study that was undertaken for the proposed Los Portales Condominium residential project located at 535 E. Montecito Street in the City of Santa Barbara. This report provides detailed information concerning the methodology, findings and conclusions of the traffic impact analysis and identifies mitigations measures to be implemented at any significantly impacted locations.

In addition to the impact analysis at intersections located in the surrounding roadway network, this report also identifies any potential project-related characteristics that are expected to impact parking availability in the neighborhoods surrounding the project; short-term impacts caused by construction activity occurring at the site; and impacts to any Congestion Management Program (CMP) facilities located in close proximity to the project. Finally, this report also includes a review of the accident history of one specific study intersection and a traffic signal warrant analysis for all unsignalized intersections identified as study locations.

Project Description

The proposed project would consist of the development of 48 residential condominiums in six buildings, with each building containing four two-bedroom units and four three-bedroom units. Each residential unit would also have access to a two-car tandem garage. The project site is located in the northwest corner of the Calle Cesar Chavez and Montecito Street intersection. This location is currently vacant and bounded by office, commercial and light industrial uses. Vehicular access for project residents will be provided via a driveway on Montecito Street and two driveways on Calle Cesar Chavez. Guest parking would be provided by two surface parking spaces located in the northern portion of the site. **Figure 1** shows the location of the proposed project site in relation to the surrounding street system while, **Figure 2** illustrates the site plan.



Legend

Project Location





SITE DATA

Bust Coverage Water, Steps, Trasin, etc. 7,663 SF (12%) Total Hardscape 26,033 SF 34%

Javarage Stope of Property 1.6%. Amount of Cart 250 ou yill Amount of Fit 2.990 ou yill

Common Down Yard Atom. Required 11.610 SF (15% of Ste). Proposed 11.378 SF (16.60- of Ste)

Parking Columbian
Plaque and Perforg: 2 Species x 45 Res. Units = 96
1. Guest Space per every 4 Res. Unit = 12
Total Plaque per every 4 Res. Unit = 12
Total Plaque per during = 10.6 Spaces
Proposed On-site Parking = 96 Residential Garage Spaces

2 Guest Parking Spaces Indiding 1 Van Accessible 56 Proposed Parking Spaces

BUILDING DATA

Placeherted Units: (241 Type Ar Units (3 bedroom) © 2,335 SF av. pross (2542 SF av. not) (241 Type & Units (3 bedroom) © 1,747 SF av. pross (1543 SF av. not) (48) Total Birds

Typical Building 141,289-8 (41,385 Building Analysiss) Ploor Analysis Level 1 - Presidented Garages 30415F 3,564 SF 1564 SF 1,445 SF 4,806,6F 5,346,5F 15,161,9F Level 3 - Residential Typical Building Total

"See Shee: A5 for Specific Unit Areas per Level.

Project Total: Typical Building x 6 = 97,962 SF (gross) 90,966 (net)

- 1. Standapp System will be provided under a separate print.
 2. Fine Sprikker System will be provided under a separate permit.
 3. See Cwi Sneets for Existing Fire Hydrant Location on adjacent properties.

SHEETINDEX

CS Rendered Site Plan, Project Data A10 Ste Plai & Area Diagrams A20 Project Bevations

ACT Building Sections ACT Typical Building Floor Plans

Typical Sulding Elevations Code Avalysis, Project Statistics

L10 Professory Landscape Plan L11 Tree Protection Plan TMI Vesting Tertative Men for Condomnium Purposes

TM2 Preliminary Grading & Drainage Plan.

TMS Preliminary Utility Plan
TM4 Preliminary Traffic Control (Staging Plan

FROJECT DATA

Housing Authority of the City of Santa Barbara

908 Laguna Street Santa Barbara, CA 93:01

Bermant Development Company

5383 Holister Avenue Goleta, CA 93117

Piekert Group Architecs, LLP 10 E. Figuetos Street, Surte 1 Santa Barbara, CA 93/01

Project Address: 535 East Montecito Street, Santa Battaria, California

Gross 71.401 SF (1.78 Acres) Site Area: Not 73,302 BF

Eisting Zone:

Proposed Zoning: M.1 Base Zoner Specific Plan or Alfodative Housing Overlay Existing Use: Viscant

PROJECT DESCRIPTION

A valdertial project consisting of (48) ownership residential units, including (24) 2-betroom and (24) 3-badroom units, all of which shall be price-testricled









Los Portales - 48 Residential Units

535 East Montecito Street Santa Barbara, California March 1, 2007

RENDERED SITE PLAN





SCALE: 1"=20"40"



Peikert Group Architects, LLP

10 East Pigeorou Street, Suits 1 Santa Barbana, CA 95300 Phone 805,965,8285 Fee: 805,963,8184









EXISTING CONDITIONS

In conjunction with City of Santa Barbara staff, a total of six intersections were identified and are analyzed in the traffic study for weekday morning and evening peak hour conditions. Of the six intersections identified for inclusion in the analysis, five are controlled by traffic signals. Only the Gutierrez Street at Olive Street intersection is unsignalized. The six study intersections are as follows:

- 1. Haley Street and Garden Street;
- 2. Gutierrez Street and Garden Street:
- 3. US-101 Northbound Ramps and Garden Street;
- 4. US-101 Southbound Ramps and Garden Street;
- 5. Gutierrez Street and Olive Street; and
- 6. Gutierrez Street and Calle Cesar Chavez

Existing Roadway Conditions

The project site is located in the southeastern portion of the City of Santa Barbara and is serviced by several highways, arterial and local streets. Brief descriptions of these facilities are provided below:

El Camino Real (US-101) is a federal highway that provides regional access to the site. In the vicinity of the project, this facility consists of six lanes west of Milpas Avenue and four lanes to the east. Primary access to the project is provided through the Garden Street interchange with secondary access available through the Milpas Street interchange.

Calle Cesar Chavez is a local street that consists of one travel lane in each direction with on-street parking. This facility is located along the eastern edge project and connects the Waterfront area to the Downtown and Eastern sections of the City.

Garden Street is an arterial street located west of the project site that consists of two travel lanes and a Class II bike lane in each direction with a landscaped median from Cabrillo Boulevard to Yanonali Street. From Yanonali Street to Gutierrez Street, this facility retains the same number of lanes, but the bike lane and landscaped median have been removed. North of Gutierrez Street, this roadway narrows to one travel lane in each direction. On-street parking is restricted in the vicinity of the project. This facility provides a direct linkage between downtown and the US-101 Freeway. Land use along the section south of US-101 is primarily industrial.

Gutierrez Street and **Haley** Street are two-lane streets that form a one-way couplet located just north of the project site. Vehicles travel westbound utilizing Gutierrez Street and eastbound along Haley Street. These streets provide direct access to/from Garden Street and US-101. On-street parking is allowed along both sides of each street. The land use along these facilities is a mix of neighborhood-serving retail, commercial and residential.

Montecito Street is a local street that consists of one travel lane in each direction. This street is located immediately adjacent to the project's southern frontage. On-street parking is allowed along both sides of the street. The land use along this roadway is primarily office and light industrial.

Description of Existing Intersection Configurations

A field inventory was conducted of all study intersection locations. The inventory included review of intersection geometric layout, traffic control, lane configuration, transit service, land use and parking. This information is required for the subsequent traffic impact analysis. **Figure 3** illustrates the existing intersection lane configurations for the six study intersections. A brief description of each intersection is provided.

Several of the study intersections consist of roadways that contain travel lanes that offer drivers a choice of movements as their travel through the intersection. These travel lanes generally consist of "through-right" and "left-through" lanes. A "shared through-right" lane is defined as a travel lane where vehicles have the option of continuing straight ahead or making a right turn without having to change lanes. The same principle holds true for a shared "left-through lane" with the exception that the vehicle can either continue straight ahead or make a left turn.

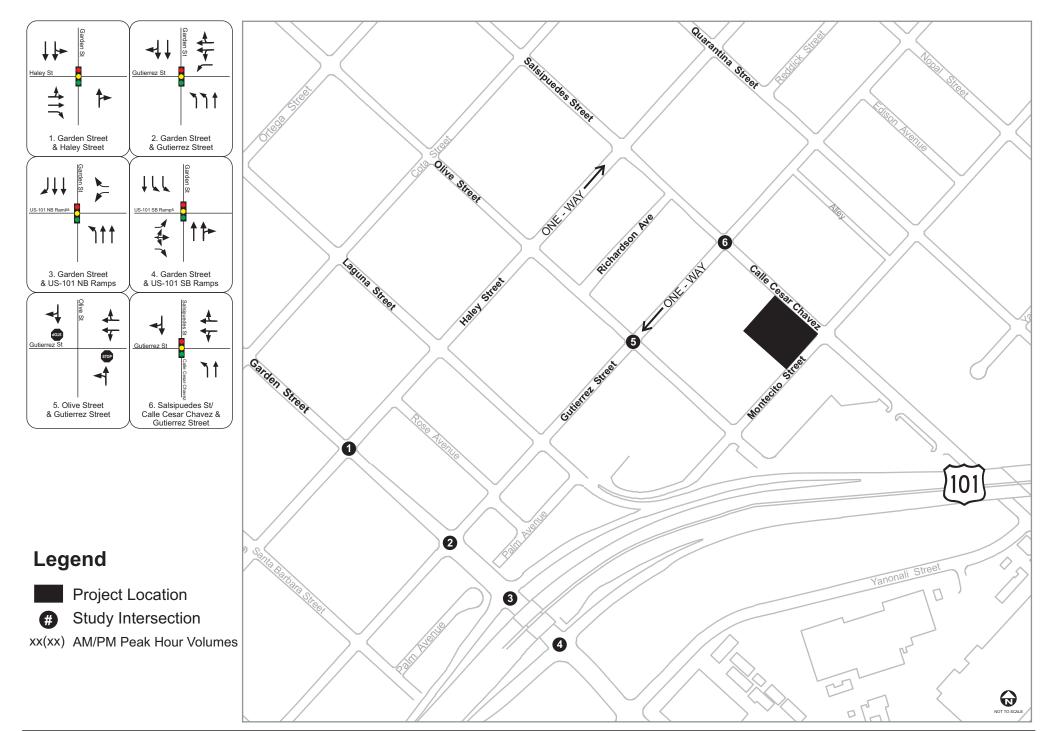
Haley Street and Garden Street (Intersection #1) is a signalized intersection through which Haley Street operates as a one-way facility with traffic restricted to traveling in an easterly direction. The northbound Garden Street approach is striped as one shared through-right lane. The southbound Garden Street approach is striped as one shared left-through lane and one through lane. The eastbound Haley Street approach is striped as one shared left-through lane, one through lane and one right-turn lane.

Gutierrez Street and Garden Street (Intersection #2) is a signalized intersection through which Gutierrez Street operates as a one-way facility with traffic restricted to traveling in a westerly direction. The northbound Garden Street approach is striped as two left-turn lanes and one through lane. The southbound Garden Street approach consists of one through lane and one shared through-right lane. The westbound Gutierrez Street approach contains one left-turn lane, one shared left-through lane and one shared through-right lane.

US-101 Northbound Ramps and Garden Street (Intersection #3) is a signalized intersection with protected/permissive left-turn phasing in the northbound Garden Street approach. The US-101 northbound on-ramp is located in the western leg of this intersection. The northbound Garden Street approach is striped to include one left-turn lane and two through lanes. The southbound Garden Street approach consists of two through lanes and one right-turn lane. The westbound approach, consisting of the US-101 northbound off-ramp, is striped as one left-turn and one right-turn lane.

US-101 Southbound Ramps and Garden Street (Intersection #4) is a signalized intersection with protected left-turn phasing in the southbound Garden Street approach. The northbound Garden Street approach contains as one through lane and one shared through-right lane. The southbound Garden Street approach consists of two left-turn lanes and one through lane. The US-101 southbound on-ramp is located in the eastern leg of this intersection and consists of one left-turn lane, one all-movement lane and one right-turn lane.

Gutierrez Street and Olive Street (Intersection #5) is a stop-controlled intersection with the northbound and southbound Olive Street approaches being controlled. The northbound Olive Street approach consists of one shared left-through lane. The southbound Olive Street approach consists of one shared through-right lane. The westbound Gutierrez Street approach contains one shared left-through lane and one shared through-right lane.





Gutierrez Street and Calle Cesar Chavez/Salsipuedes Street (Intersection #6) is a signalized intersection with permissive left-turn phasing in all approaches. The northbound Calle Cesar Chavez approach is striped as one left-turn lane and one through lane. The southbound Calle Cesar Chavez approach is striped to include one shared through-right lane. The westbound Gutierrez Street approach consists of one shared left-through lane and one shared through-right lane.

Existing Transit Operations

The Municipal Transit District (MTD) of the City of Santa Barbara operates three bus lines that travel within the study area of the project site. A description of these transit routes are as follows:

Carpinteria (Line 20) – This route operates between the City of Santa Barbara Transit Center and the town of Carpinteria. Within the study area it travels east along Haley Street and west along Gutierrez Street. Service is provided on weekdays, weekends, and minor holidays.

Carpinteria Express (Line 21x) – This limited-stop route operates between the City of Santa Barbara Transit Center and the town of Carpinteria. Within the study area it travels south along Garden Street and west along Gutierrez Street. Service is provided on weekdays, weekends, and minor holidays.

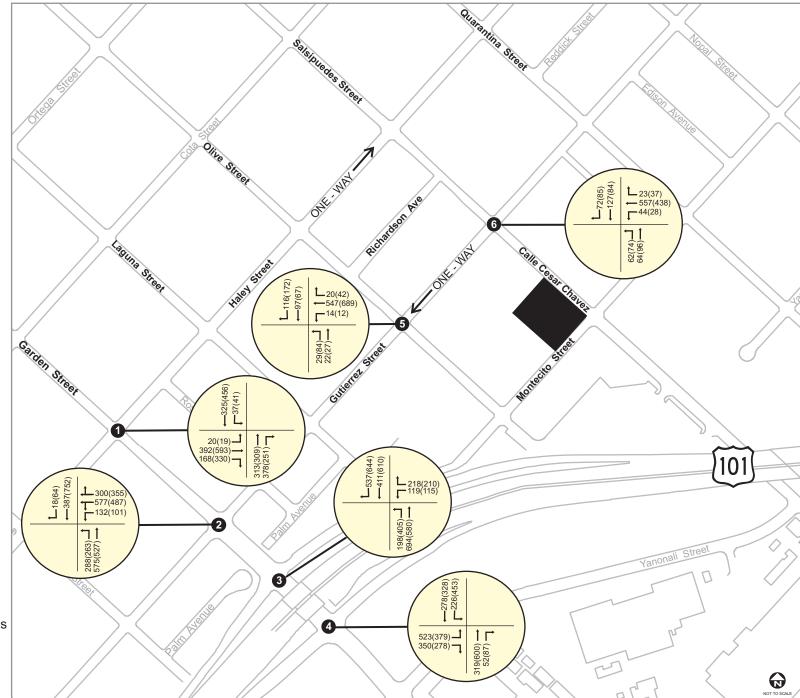
Valley Express 84 – This limited-stop route operates between the town of Solvang and the City of Santa Barbara Transit Center. Within the study area it travels north along Garden Street, east along Haley Street and west along Gutierrez Street. Service is provided on weekdays only.

Existing Traffic Volumes

Weekday morning and evening peak period turning movement traffic counts were conducted in October and November of 2006 for five of the six analyzed intersections. The traffic counts were conducted from 7:00-9:00 AM and 4:00-6:00 PM and the traffic impact analysis was based on the highest single hour of traffic (during each of the peak periods) at each study intersection.

A supplemental count was conducted in February of 2007 at the Gutierrez Street at Garden Street intersection to verify the distribution of traffic utilizing the dual westbound left-turn lanes. This supplemental count verified that the distribution was uneven and that only 25 percent of traffic utilized the interior lane and the remaining 75 percent utilized the exterior lane. This condition is due to the close proximity, approximately 225 feet, of the US-101 northbound on-ramp to the Gutierrez Street at Garden Street intersection.

Traffic counts at the sixth intersection, Gutierrez Street at Olive Street, were conducted in January of 2008. **Figure 4** shows the existing peak hour traffic volumes at the analyzed intersections. The traffic count sheets are provided in **Appendix A**.



Legend



Study Intersection

xx(xx) AM/PM Peak Hour Volumes



TABLE 1: LEVEL OF SERVICE SIGNALIZED AND UNSIGNALIZED INTERSECTIONS

Level of Service	Description	V/C Ratio	Stop-Controlled Intersection Delay (sec per veh)
Α	Uncongested operations; all queues clear in a single signal cycle.	<u><</u> 0.600	<u><</u> 10
В	Very light congestion; an occasional approach phase is fully utilized.	>0.600 to 0.699	>10 and <u><</u> 15
С	Light congestion; occasional backups on critical approaches.	>0.700 to 0.799	>15 and <u><</u> 25
D	Significant congestion on critical approaches, but intersection functional. Cars required to wait through more than one cycle during short peaks. No long-standing queues formed.	>0.800 to 0.899	>25 and <u><</u> 35
E	Severe congestion with some long-standing queues on critical approaches. Traffic queue may block nearby intersections upstream of critical approaches.	>0.900 to 0.999	>35 and <u><</u> 50
F	Total breakdown, stop-and-go operation.	> 1.000	> 50
Source: Tra	ansportation Research Board, Transportation Research Circular 212, Interim M	,	Capacity, 1980.

Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C., 2000.

Existing Traffic Operations Analysis

The City of Santa Barbara considers level of service C to be the minimum acceptable operating standard for signalized intersections, and an average vehicle delay of 22 seconds as the minimum standard for unsignalized intersections.

The morning and evening peak hour level of service analyses were conducted for the six study intersections based on the measured traffic volumes and the methodologies described previously. All intersection analyses are performed using the TRAFFIX (Traffic Impact Analysis) software program. The existing conditions level of service analysis results are summarized in Table 2.

TABLE 2: LOS ANALYSIS - EXISTING CONDITIONS

		AM P	eak Hour	PM F	eak Hour
	Intersection	LOS	V/C (Delay)	LOS	V/C (Delay)
1	Haley St at Garden St	В	0.672	В	0.654
2	Gutierrez St at Garden St	D	0.820	С	0.792
3	US-101 NB Ramps at Garden St	Α	0.555	С	0.731
4	US-101 SB Ramps at Garden St	Α	0.449	Α	0.569
5	Gutierrez St at Olive St	С	15.5	С	20.0
6	Gutierrez St at Calle Cesar Chavez	Α	0.444	Α	0.389

LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio for Signalized Intersections

The results shown in Table 2 indicate that the Gutierrez Street at Garden Street intersection is currently operating at LOS D and C in the morning and evening peak hours, respectively. In both periods, the intersection experiences a V/C ratio above 0.770. This intersection is considered to be operating at an unacceptable level of service under City of Santa Barbara standards. The remaining five analyzed intersections are currently operating at LOS C or better during both peak hours. The detailed level of service worksheets for the analyzed intersections are included in Appendix B.

EXISTING WITH PROJECT CONDITIONS

Project Trip Generation

The first step in analyzing the future traffic conditions with the project is to estimate the number of new trips expected to be generated by the proposed project. This section of the report describes the estimation of future traffic generation of the proposed project.

As described previously, the proposed project would consist of a total of 48 residential condominium units. Utilizing trip generation rate data contained in the Institute of Transportation Engineers (ITE) *Trip Generation,* 7^{th} *Edition,* the estimated trips for the proposed project were calculated. The resulting trip generation estimates are summarized in **Table 3**.

TABLE 3: PROJECT TRIP GENERATION ESTIMATES

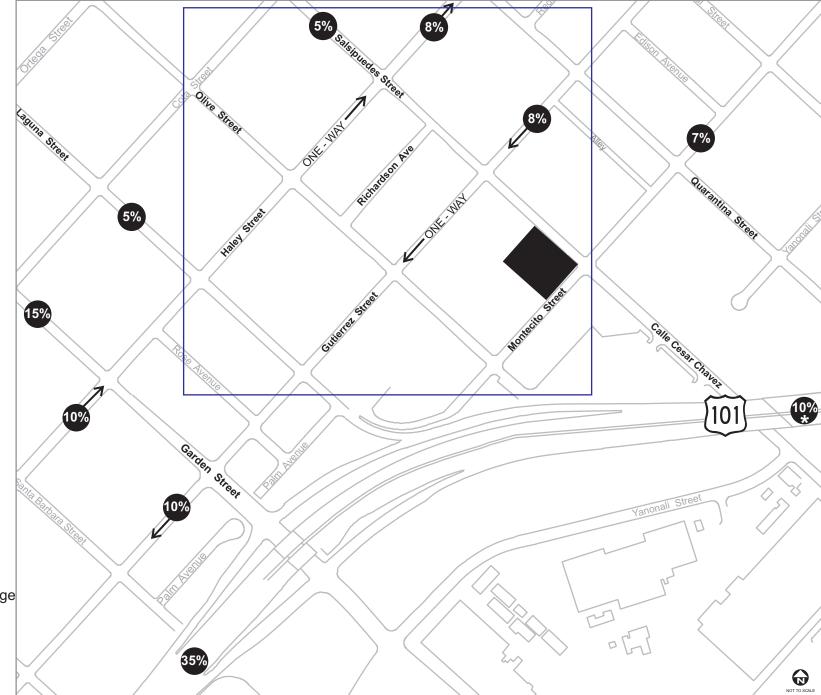
535 E. Montecito Street	Land	and ITE Trip Rates						G.	Trips Ends Generated							
	Use	Weekday AM		Weekday PM			Daily	Size (du)	Weekday AM			V	Weekday PM			
Street	Code	In	Out	Total	In	Out	Total	Daily	(uu)	In	Out	Total	In	Out	Total	Daily
Condominiums	230	0.07	037	0.44	0.35	0.17	0.52	5.86	48	3	18	21	17	8	25	281
Total	Total 3 18 21 17 8 25 281									281						
	Note: DU – dwelling unit Source: Institute of Transportation Engineers, <i>Trip Generation</i> , 7 th Edition.															

The proposed project is expected to generate 281 daily trips. A total of 21 trips are expected to occur during the morning peak hour and 25 trips during the evening peak hour.

Project Trip Distribution and Assignment

The next step in the forecast of project traffic is the anticipated distribution of the trip estimates. The trip distribution assumptions are used to determine the origin and destination of the new vehicle trips associated with the project. The geographic distribution of the project trips is based on the locations of neighborhoods and residential areas, employment and service centers, the street system that serves the site, and recent traffic data collected in the project study area.

The trip distribution developed for the proposed project is shown on **Figure 5**. Utilizing the project trip generation and the trip distributions, the project-only traffic volumes were assigned to the street network. **Figure 6** illustrates the resulting project-only peak hour traffic volumes for the morning and evening time periods at the analyzed intersections. The resulting existing with project traffic volumes are shown on **Figure 7**.





Project Location

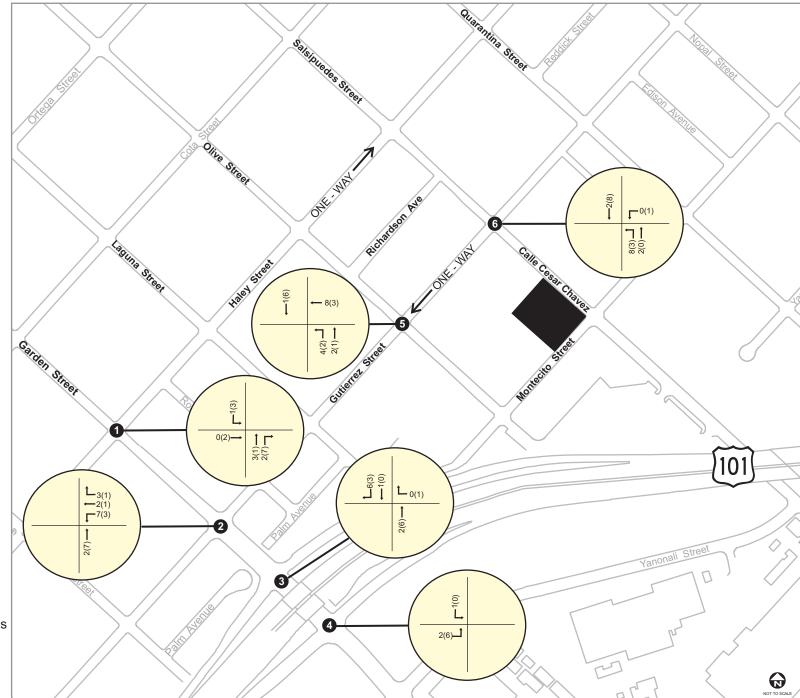
Distribution Percentage

Local Traffic 5%

5% Via Milpas St on Montecito St

5% Via Garden St





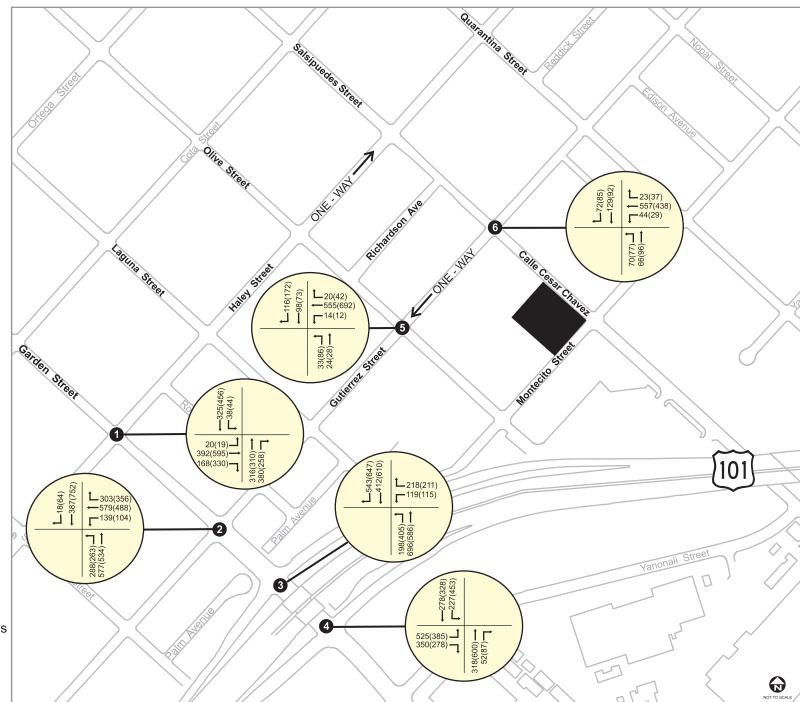
Legend

Project Location

Study Intersection

xx(xx) AM/PM Peak Hour Volumes





Legend



Study Intersection

xx(xx) AM/PM Peak Hour Volumes



Threshold of Significance

Significant traffic impacts are determined based on a threshold of significance set by the lead agency conducting the environmental review. The City of Santa Barbara has established the following threshold criteria to determine if a project has a significant traffic impact:

- A project-specific significant impact is deemed to have occurred if a development project would cause the volume-to-capacity (V/C) ratio at an intersection to exceed 0.77, or if the project would increase the V/C ratio at intersections which already exceed 0.77 by 0.01.
- A cumulative project significant impact is deemed to have occurred if a development project would add vehicle trips to an intersection which is forecast to operate above V/C = 0.77 with cumulative traffic volumes.

A threshold of five vehicles was determined through a statistical analysis conducted by City of Santa Barbara staff. This analysis showed that there is a statistical probability that at least one vehicle trip will travel through an impacted intersection at least once a day when five or more trips are generated by a project. If four or less trips are generated, the level of certainty that a project trip will travel through an impacted intersection is reduced to the level of uncertainty. This leads to the conclusion that when a project generates less than five vehicle trips, it is not considered to have added any traffic to the impacted intersection.

Existing With Project Traffic Operations Analysis

The results of the existing with project conditions level of service analysis, based on the traffic volumes provided in **Figure 7**, are summarized in **Table 4** for the morning and evening peak hours.

			Existing C	onditio	ns	Existing With Project Conditions						
	Intersection		l Peak lour	PM Peak Hour		AM Peak Hour			PM Peak Hour			
		LOS	V/C (Delay)	LOS	V/C (Delay)	LOS	V/C (Delay)	ΔV/C	LOS	V/C (Delay)	ΔV/C	
1	Haley St at Garden St	В	0.672	В	0.654	В	0.676	0.004	В	0.667	0.013	
2	Gutierrez St at Garden St	D	0.820	С	0.792	D	0.826	0.006	С	0.794	0.002	
3	US-101 NB Ramps at Garden St	Α	0.555	С	0.731	Α	0.558	0.003	С	0.732	0.001	
4	US-101 SB Ramps at Garden St	Α	0.449	Α	0.569	Α	0.450	0.001	Α	0.571	0.002	
5	Gutierrez St at Olive St	С	15.5	С	20.0	С	15.7	0.2	С	20.1	0.1	
6	6 Gutierrez St at Calle Cesar Chavez		0.444	Α	0.389	Α	0.450	0.006	А	0.396	0.007	
Note	<u>s:</u>											

TABLE 4: LOS ANALYSIS - EXISTING WITH PROJECT CONDITIONS

The results shown in **Table 4** indicate that with the addition of project-generated traffic, the Gutierrez Street at Garden Street intersection is again expected to operate at LOS D, with a V/C ratio of 0.826 in the morning peak hour and LOS C with a V/C ratio of 0.794 in the evening peak hour.

LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio for Signalized Intersections

As stated earlier in this report, this intersection is considered to be operating at an unacceptable level of service under City of Santa Barbara standards. Although the overall V/C ratio at the Gutierrez Street at Garden Street intersection increased as a result of adding project-generated traffic, the incremental increase is below the level needed to be considered a project-specific

significant impact. The increase in V/C ratio created by project-related traffic was 0.006 in the morning peak hour and 0.002 in the evening peak hour. Both of these values are well below the 0.010 incremental increase allowed under City of Santa Barbara traffic impact guidelines.

The remaining five analyzed intersections are expected to continue operating at LOS C or better during both peak hours. Therefore, the proposed project **does not** have any project-specific significant traffic impacts as defined under the City of Santa Barbara threshold of significance. The detailed level of service worksheets for the analyzed intersections are included in **Appendix B**.

The project description and traffic data utilized in this report is the same data that was used in the Associated Transportation Engineers report conducted in April 2007. In that report, the proposed project was found to have a project-specific significant traffic impact during the morning peak hour at the Gutierrez Street at Garden Street intersection. This determination was made based on the fact that the V/C ratios that were calculated using the same exact data were rounded to two digits after the decimal. This resulted in the V/C ratio calculated under the Existing with Project scenario to be read as 0.83. When this value was compared to the V/C ratio calculated for the Existing Conditions scenario of 0.82, after rounding to two digits, a difference of 0.01 was calculated and the intersection was identified as having a project-specific significant traffic impact.

The V/C ratios calculated as part of the current traffic impact analysis were rounded to the industry-standard of three digits after the decimal. This calculation resulted in the values discussed above of 0.820 for the Existing Conditions scenario and 0.826 for the Existing with Project scenario. When these two values are compared, traffic generated by the proposed project is only responsible for an incremental increase in the V/C ratio of 0.006, which is well below the threshold of 0.010 provided in the City's traffic impact guidelines. Under this methodology, the project would not have a project-specific significant traffic impact at the Gutierrez Street at Garden Street intersection.

The same situation occurred in the evening peak hour with the only difference being the values calculated for the V/C ratios. For the evening peak hour, the Existing with Project scenario was found to have a V/C ratio of 0.80 and the Existing Conditions scenario a value of 0.79, when rounded at two digits. If these values were expanded to three digits, the results would be 0.796 and 0.794, respectively. Instead of an apparent incremental increase of 0.010, the actual increase was 0.002. As similar to the morning peak hour situation, this value is substantially lower than the City's significance threshold and would therefore not result in a project-specific significant traffic impact.

FUTURE BASE CONDITIONS

To evaluate the potential impact of the proposed project on future traffic conditions, it is first necessary to develop a forecast of future traffic volumes in the study area under conditions without the proposed project. This provides a basis against which to measure the potential significant impacts of the proposed project.

The anticipated buildout year of the proposed project is expected to be 2010. The projection of Year 2010 No-Project (future without project) traffic consists of existing traffic plus ambient traffic growth (general background regional growth) plus growth in traffic generated by specific cumulative projects expected to be completed by the year 2010. The following describes the two growth components.

Ambient Traffic Growth

Ambient traffic growth is the traffic growth that will occur in the study area due to general employment growth, housing growth and growth in regional through trips in southern California. Even if there was no change in housing or employment in the City of Santa Barbara, there will be some background (ambient) traffic growth in the region. Per the City staff, a 0.05 percent per year growth rate was assumed as a conservative estimate of traffic increase in the study area. Existing 2007 traffic volumes were increased by a factor of 1.015 to account for ambient traffic growth to the year 2010 (three years at one-half percent per year).

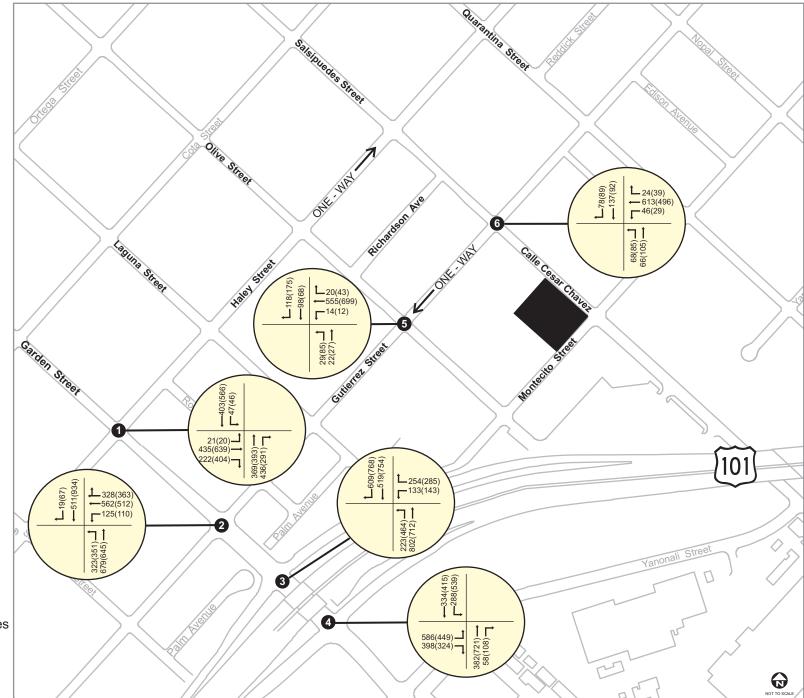
Cumulative Project Growth

Cumulative project traffic growth is growth due to specific, known development projects in the area surrounding the study locations that may affect traffic circulation. This growth is also included in the analysis of the future without project conditions. A list of development pending and/or approved projects expected to occur within the surrounding area was generated in coordination with City of Santa Barbara staff. A total of 74 projects were identified as potentially affecting traffic circulation through the study area. The individual lists provided by City staff are in **Appendix C**.

Traffic generated due to these projects has been estimated based on information provided by city staff and supplemented with standard trip generation data from the Institute of Transportation Engineers' (ITE) *Trip Generation, 7th Edition.* The cumulative projects are forecast to generate approximately 521 morning and 1,212 evening peak hour trips. The trips expected from the cumulative projects were then assigned to the traffic model as part of the development of the future base traffic projections.

Future Base Traffic Analysis

As mentioned above, the proposed project is anticipated to be completed by 2010; therefore future conditions without the project were assessed for this year. The future without project traffic volumes were developed, as shown in **Figure 8**, and operating conditions were analyzed at the six study intersections for the morning and evening peak hours.



Legend



Study Intersection

xx(xx) AM/PM Peak Hour Volumes



Based on the future base traffic forecast, the levels of service at the analyzed intersections were calculated for the morning and evening peak hours. **Table 5** summarizes the peak hour level of service results.

TABLE 5: LOS ANALYSIS - FUTURE BASE CONDITIONS

		AM P	eak Hour	PM Peak Hour		
	Intersection	LOS	V/C (Delay)	LOS	V/C (Delay)	
1	Haley St at Garden St	С	0.761	С	0.748	
2	Gutierrez St at Garden St	D	0.876	D	0.839	
3	US-101 NB Ramps at Garden St	В	0.618	D	0.844	
4	US-101 SB Ramps at Garden St	Α	0.510	В	0.661	
5	Gutierrez St at Olive St	С	15.7	С	20.5	
6	Gutierrez St at Calle Cesar Chavez	Α	0.480	А	0.422	

Notes:

LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio for Signalized Intersections

As shown in **Table 5**, the Gutierrez Street at Garden Street intersection is expected to operate at LOS D in both the morning and evening peak hours. The intersection of US-101 Northbound Ramps and Garden Street is also expected to operate at LOS D in the evening peak hour. Under these conditions, both of these intersections are considered to operate at unacceptable levels of service according to City of Santa Barbara standards. The remaining four analyzed intersections are expected to continue operating at LOS C or better during both peak hours. The detailed level of service worksheets for conditions without the project are included in **Appendix B**.

CUMULATIVE PROJECT CONDITIONS

Cumulative Project Traffic Analysis

Under the cumulative project scenario, the project-only peak hour traffic volumes, shown on **Figure 6**, are added to the future base traffic volumes. The resulting year 2010 cumulative project morning and evening peak hour traffic volumes are shown on **Figure 9**.

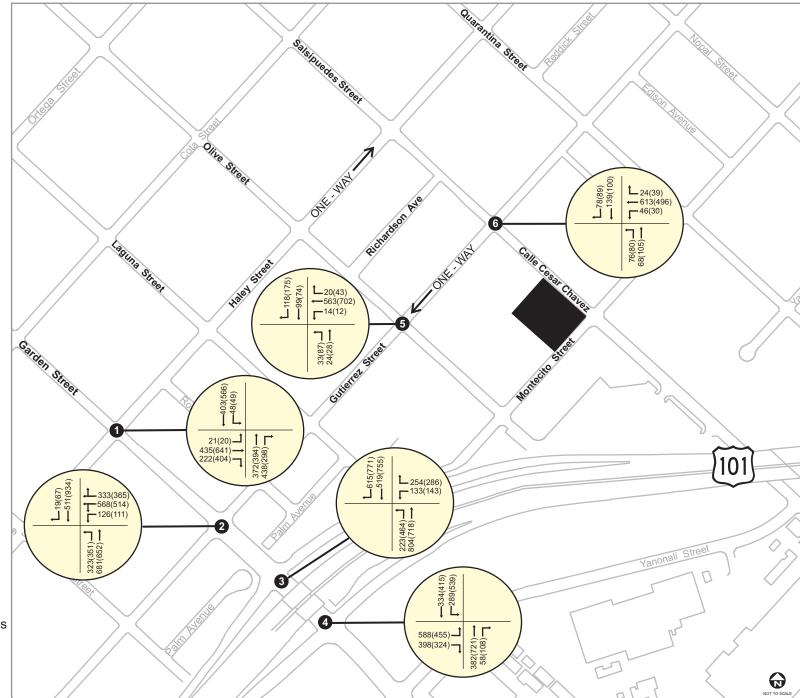
The intersection volume-to-capacity ratios and corresponding levels of service for the cumulative project condition were calculated and the results summarized in **Table 6** for each of the six analyzed locations. The resultant change in V/C ratio comparing the "Cumulative Project" to the "Future Base" is also presented in the table.

TABLE 6: LOS ANALYSIS - CUMULATIVE PLUS PROJECT CONDITIONS

		Future Base Conditions				Cumulative Project Conditions						
	Intersection		Peak lour		PM Peak Hour		AM Peak Hour			PM Peak Hour		
		LOS	V/C (Delay)	LOS	V/C (Delay)	LOS	V/C (Delay)	Added Trips	LOS	V/C (Delay)	Added Trips	
1	Haley St at Garden St	С	0.761	С	0.748	С	0.765	6	С	0.755	13	
2	Gutierrez St at Garden St	D	0.876	D	0.839	D	0.881	14	D	0.840	12	
3	US-101 NB Ramps at Garden St	В	0.618	D	0.844	В	0.620	9	D	0.846	10	
4	US-101 SB Ramps at Garden St	Α	0.510	В	0.661	А	0.510	3	В	0.663	6	
5	Gutierrez St at Olive St	С	15.7	С	20.5	С	15.9	15	С	21.2	12	
6 Gutierrez St at Calle Cesar Chavez		Α	0.480	Α	0.422	Α	0.481	12	Α	0.429	12	
Note		go Vobie	olo Dolay (S	oconds)	V/C = Vol	umo to (Canacity Pa	tio for Sign	alizad In	torcootions		

When the cumulative project forecasts were analyzed at the study intersections, the results indicate that the proposed project is expected to create a significant cumulative project traffic impact at two of the six locations under City of Santa Barbara significant impact criteria. Under future base traffic conditions, the intersections of Gutierrez Street at Garden Street and US-101 Northbound Ramps at Garden Street are expected to operate at LOS D, which exceeds the City's threshold of LOS C and a V/C ratio of 0.77 or greater. Therefore, a cumulative project significant impact is created when five or more additional vehicles generated by the proposed project travel through either of these intersections.

The remaining four analyzed intersections are expected to continue operating at LOS C or better during both peak hours. The detailed level of service worksheets for the analyzed intersections are included in **Appendix B**.



Legend



Study Intersection

xx(xx) AM/PM Peak Hour Volumes



CUMULATIVE PROJECT MITIGATION MEASURES

The proposed project was determined to have significant cumulative traffic impacts at two study intersections: Gutierrez Street at Garden Street and US-101 Northbound Ramps at Garden Street. Each intersection was analyzed in an effort to identify traffic mitigations that could be used to reduce the overall impacts associated with cumulative traffic conditions to a less than significant level.

Two potential mitigation measures were identified for the Gutierrez Street at Garden Street intersection but were deemed infeasible due to physical and procedural restrictions. The first potential mitigation considered involved widening the westbound approach of the intersection to accommodate an additional westbound lane and restriping the approach to consist of two exclusive left-turn lanes, one through lane and one shared through-right lane. While this improvement would mitigate the cumulative traffic impacts occurring at this intersection, it would require the project to reimburse the City for any expenses associated with acquiring additional right of way along the southern edge of Gutierrez Street.

The second potential mitigation measure identified at the Gutierrez Street at Garden Street intersection would optimize the traffic cycle length and signal phasing to operate more efficiently. While this improvement does not encounter any significant physical impediments, it does have a procedural obstacle it cannot overcome. The City's current traffic impact analysis guidelines state that the Intersection Capacity Utilization methodology is to be used to determine the level of service and volume to capacity ratios for intersections under City jurisdiction. Unfortunately, this methodology does not utilize traffic cycle lengths and signal timings to analyze traffic operations at intersections. While improvements may be made to the actual operation of the traffic signal at this intersection, those improvements would not be reflected as part of the traffic impact analysis and the significant impact at this intersection would remain as an unmitigated impact. Due to these restrictions, no feasible mitigation measures could be identified that would reduce the significant cumulative traffic impact occurring at the Gutierrez Street at Garden Street intersection to a less than significant level.

Due to the extremely limited right of way at the US-101Northbound Ramps at Garden Street intersection, no feasible, physical mitigations could be identified. Any changes to the traffic signal cycle length or signal timing would have similar results as those discussed for the Gutierrez Street at Garden Street intersection. Based on these restrictions, this intersection is also expected to experience a significant cumulative traffic impact for which no feasible mitigation measures can be identified.

PARKING ANALYSIS

The proposed project will include a total of 98 parking spaces, 96 of which are located in ground-level two-car tandem parking garages that can be accessed directly from individual residential units. The remaining two parking spaces will be provided for use by visitors. Any additional parking needed by visitors to the project will need to be accommodated by using available on-street parking.

An analysis of the parking at the proposed project was conducted to determine if this supply of visitor parking would be adequate to meet the project's needs. The analysis of the project's parking demand consists of two steps: 1) determination of the peak parking demands for the project, and 2) identification of the peak on-street parking demand of the surrounding uses.

PARKING REQUIREMENTS

The proposed project consists of a mix of 48 residential dwelling units. The total number of parking spaces required for the proposed project was based on parking code rates as provided in the City of Santa Barbara Municipal Code. The total number of required parking spaces is provided in **Table 7**.

IABLE	TABLE 7: CITY CODE BASED PARKING REQUIREMENTS									
Land Use	Units (DU)	Parking Code Requirements	Parking Requirements							
Residential Condo	miniums									
2 - Bdrm	24	2.0 spaces per dwelling unit	48							
3 - Bdrm	24	2.0 spaces per dwelling unit	48							
Guest	48	1.0 spaces per 4 dwelling units	12							
Total Parking Dem	108									
Source: City of Santa	Barbara Municipal (Code.								

TABLE 7: CITY CODE BASED PARKING REQUIREMENTS

As stated above, the proposed project will include a total of 96 parking spaces in ground-level, tandem parking garages and two additional visitor parking spaces. When this total is compared to the 108 parking spaces required under City code, it was determined that the project is short a total of 10 parking spaces. This shortfall would have to be accommodated by available parking spaces located on the surrounding streets.

EXISTING ON-STREET PARKING CONDITIONS

On-street parking surveys were conducted along the streets within a two-block radius surrounding the project site to determine if adequate on-street parking is available for use by visitors to the proposed project. The parking surveys were conducted on two separate days, Wednesday, December 18th and Thursday, December 19th and consisted of the following locations:

- Haley Street, between Olive Street and Quarantina Street;
- Gutierrez Street, between Olive Street and Quarantina Street;
- Richardson Avenue, between Olive Street and Calle Cesar Chavez;
- Montecito Street, between Olive Street and Quarantina Street;
- Olive Street, between Haley Street and Montecito Street;
- Calle Cesar Chavez, between Haley Street and the US-101 overpass; and
- Quarantina Street, between Haley Street and Montecito Street.

The 14-block study area was determined to contain an estimated 475 on-street parking spaces. The average weekday on-street parking utilization for this area is shown in **Table 8**.

Zone	1	2	3	4	5	6	7	Total Spaces	Utilization Level
Total	70	126	67	47	46	57	62	475	(%)
8:00 AM	42	75	50	16	24	44	44	295	62
9:00 AM	52	95	54	23	34	48	44	350	74
10:00 AM	58	101	61	27	41	53	52	392	83
11:00 AM	63	107	64	29	40	54	58	414	87
12:00 PM	66	106	59	32	39	51	54	406	85
1:00 PM	57	100	57	27	36	49	48	373	79
2:00 PM	58	99	55	26	36	50	47	370	78
3:00 PM	63	102	53	23	35	54	44	372	78
4:00 PM	62	105	52	32	34	49	47	378	80
5:00 PM	47	71	32	23	38	41	43	293	62
6:00 PM	29	51	19	11	27	33	41	210	44
7:00 PM	28	38	13	9	20	28	42	177	37
8:00 PM	22	29	11	8	15	20	32	135	28

TABLE 8: AVERAGE WEEKDAY ON-STREET PARKING UTILIZATION

The City of Santa Barbara utilizes an occupancy level of 85 percent as a guideline for determining parking impacts. Based on the information provided in **Table 8**, the on-street parking demand meets or exceeds the City's 85 percent parking utilization threshold during the 11:00 am to 12:00 pm and 12:00 pm to 1:00 pm periods. The on-street parking demand reaches a parking utilization level of 80 percent or greater during the 10:00 am to 11:00 am and the 4:00 pm to 5:00 pm periods, but these periods do not meet or exceed the City's threshold and are therefore considered to be acceptable. The remaining periods throughout the day are also considered to be acceptable levels of on-street parking utilization. The survey count data is provided in **Appendix F**.

EXISTING WITH PROJECT ON-STREET PARKING CONDITIONS

The total visitor parking demand was calculated using the City of Santa Barbara parking requirements that state that one visitor parking space must be provided for every four dwelling units. Based on this data, the minimum number of visitor parking spaces that must be provided to meet parking requirements would be 12 spaces.

Parking time-of-day factors for residential guest parking demand, obtained from The Urban Land Institute's (ULI) Shared Parking Manual, were used to calculate the hourly parking demand that the proposed project must meet throughout the day. It was assumed that this visitor parking demand would be reduced by two spaces to account for the visitor parking spaces to be provided on-site. Any remaining parking demand would need to be accommodated through the use of available on-street parking. The existing on-street parking utilization, as calculated above in **Table 8**, was added to any visitor parking demand that was not accommodated on-site and new parking utilization levels were calculated and are shown in **Table 9**.

As discussed above, the on-street parking demand of the surrounding commercial and office uses is greatest between 8:00 am and 5:00 pm. **Table 9** shows that during this time period the proposed project is expected to have a visitor parking demand of two spaces, which can be accommodated onsite. Therefore, the proposed project is not expected to add any additional demand for on-street parking during the mid-morning periods when on-street parking utilization levels meet or exceed the City's threshold for acceptable conditions.

TABLE 9: VISITOR PARKING DEMAND

Time	Time-of-Day Factors (%)	Total Spaces Required	On-Street Parking Spaces Needed	Existing On- Street Parking Demand	Existing with Project On-Street Parking Demand	On-Street Utilization Level (%)
8:00 AM	20	2	0	295	295	62
9:00 AM	20	2	0	350	350	74
10:00 AM	20	2	0	392	392	83
11:00 AM	20	2	0	414	414	87
12:00 PM	20	2	0	406	406	85
1:00 PM	20	2	0	373	373	79
2:00 PM	20	2	0	370	370	78
3:00 PM	20	2	0	372	372	78
4:00 PM	20	2	0	378	378	80
5:00 PM	40	5	3	293	296	62
6:00 PM	60	7	5	210	215	45
7:00 PM	100	12	10	177	187	39
8:00 PM	100	12	10	135	145	30

After 5:00 pm, the project's visitor parking demand increases and a portion of the proposed project's visitor parking demand would need to be accommodated by available on-street parking spaces. The demand for on-street parking on the surrounding streets begins to decrease significantly at 5:00 pm and the project's need for additional visitor parking is not expected to create any impacts on the overall on-street parking resources in the study area.

ALTERNATIVES

As currently designed, the proposed project is expected to have a cumulative project significant impact at two study intersections. To satisfy CEQA standards, the following design alternatives were analyzed to determine if the proposed project would create any significant traffic impacts under each scenario:

- No Project;
- Current Zoning Future Development;
- Reduced Project;
- · Parking Purchase; and
- Hybrid Project

Each design scenario listed above was analyzed qualitatively in comparison to the original proposed project.

NO PROJECT ALTERNATIVE

This alternative analyzed the expected traffic conditions if the subject property were to remain an undeveloped, vacant lot. This analysis was conducted during the Future Base scenario presented earlier in this report. Under that scenario, the Gutierrez Street at Garden Street intersection is expected to operate at LOS D in both the morning and evening peak hours. The intersection of US-101 Northbound Ramps and Garden Street is also expected to operate at LOS D in the evening peak hour. Under these conditions, both of these intersections are considered to operate at unacceptable levels of service according to City of Santa Barbara standards. The remaining four analyzed intersections are expected to continue operating at LOS C or better during both peak hours.

The results of this analysis show that even if the proposed residential project is not developed, the two intersections that are expected to experience significant cumulative project impacts would still be expected to operate at unacceptable levels of service in both the morning and evening peak hours.

CURRENT ZONING FUTURE DEVELOPMENT ALTERNATIVE

The project site has a current zoning of M-1 – Light manufacturing. Based on information provided by City of Santa Barbara staff, the maximum size development allowed under the current zoning designation would be 26,600 square feet from an existing demolition credit. The property is also eligible for a development plan approval allocation that could add an additional 3,000 square feet. This means that under current the existing zoning ordinances in place for the property, a total of 29,600 square feet of non-residential development can be built on the site.

To determine if a development project located on this site would create any significant cumulative project traffic impacts at the study intersections, a trip generation comparison was conducted between the proposed residential land use and the maximum size development allowed under the site's current zoning. There are two land use classifications provided in ITE's *Trip Generation* that could potentially meet the current permitted zoning for the proposed site: general light industrial and manufacturing. A general light industrial use is defined as a facility that employs fewer than 500 people and includes activities such as printing, material testing and the assembly of small equipment. A manufacturing use is defined as a facility whose primary activity is converting raw materials or parts into finished products. Trip generation estimates were developed for both of

these uses and compared to those previously calculated for the proposed residential condominiums. The results of this comparison are provided in **Table 10**.

TABLE 10: COMPARISON OF TRIP GENERATION ESTIMATES

535 E.	Land	ITE Trip Rates			C!	Trips Ends Generated										
Montecito	Use	Weekday AM		Weekday PM		Daily	Size (du/ksf)	Weekday AM		Weekday PM			Daily			
Street	Code	In	Out	Total	In	Out	Total	Daily	(uu/Ksi)	In	Out	Total	In	Out	Total	Dany
Proposed Land Us	Proposed Land Use															
Condominiums	230	0.07	0.37	0.44	0.35	0.17	0.52	5.86	48	3	18	21	17	8	25	281
Subtotal						3	18	21	17	8	25	281				
Zoned Land Use																
General Light Industrial	110	0.81	0.11	0.92	0.12	0.86	0.98	6.97	29.6	24	3	27	4	25	29	206
Difference between Residential and Light Industrial Land Uses						(21)	15	(6)	13	(17)	(4)	75				
Manufacturing	140	0.56	0.17	0.73	0.27	0.47	0.74	3.82	29.6	17	5	22	8	14	22	113
Difference between Residential and Manufacturing Uses							(14)	13	(1)	9	(6)	3	168			
Note: DU – dwelling unit; KSF – 1,000 square feet. Source: Institute of Transportation Engineers, <i>Trip Generation</i> , 7 th Edition.																

As shown in **Table 10**, the proposed residential use is expected to generate a greater number of daily vehicle trips than the currently permitted uses, but it is expected to produce less peak hour trips than the maximum allowable industrial use and approximately the same number of peak hour trips as the maximum allowable manufacturing use. The proposed residential project will also not increase the number of vehicle trips expected to travel through the significantly-impacted intersections when compared to the allowable uses, as shown in **Table 11**.

TABLE 11: EXPECTED PEAK HOUR VEHICLE TRIPS TRAVELING THROUGH IMPACTED INTERSECTIONS

Intersection	Land Use					
Garden St at Gutierrez St	Residential Condominiums	General Light Industrial	Manufacturing			
Morning Peak Hour	14	16	10			
Evening Peak Hour	12	10	11			
Garden St at US-101 NB Ramps	Residential Condominiums	General Light Industrial	Manufacturing			
Morning Peak Hour	9	10	9			
Evening Peak Hour	10	10	9			

Based on the traffic volumes presented in **Table 11**, the overall difference between the expected vehicle trips generated by the proposed residential use and those generated by the other allowable uses is minimal and is not considered great enough to create any significant traffic impacts that would not occur if either of the permitted uses were developed on the site.

REDUCED PROJECT ALTERNATIVE

This project design alternative would reduce the number of residential units to be constructed as a part of the project to a level where no significant cumulative project traffic impacts would occur. The maximum number of residential units that can be included in the proposed project without adding more than four vehicle trips to the Gutierrez Street at Garden Street intersection can be calculated by using the following proportionality equation:

$$\frac{\text{VTop}}{\text{TRop}} = \frac{\text{VTnsi}}{\text{TRrp}}$$

where,

VTop = vehicle trips generated by Original Proposed Project;

VTnsi = maximum vehicle trips generated by project that do not result in a significant

cumulative project impact;

TRop = total number of residential units in Original Proposed Project; and

TRrp = maximum number of residential units allowed in Reduced Project alternative

When this equation is applied to the morning peak hour conditions occurring at the Gutierrez Street at Garden Street intersection, it would appear as follows:

TRrp =
$$\frac{4(48)}{14}$$

TRrp = 13.7 res. units

Based on this calculation, the proposed project would have to be reduced to less than 14 residential units to ensure that four or less vehicle trips are traveling through the Gutierrez Street at Garden Street intersection. **Table 12** shows the maximum number of residential units that could be included in the proposed project and not result in a significant cumulative project traffic impact at either of the two previously identified intersections during both the morning and evening peak hours.

TABLE 12: MAXIMUM NUMBER OF RESIDENTIAL UNITS UNDER REDUCED PROJECT ALTERNATIVE

Time Period	Vehicle Trips Generated by Original Project	Maximum Number of Residential Units Allowed					
Gutierrez Street at Garden Street							
Morning Peak Hour	14	13.7					
Evening Peak Hour	12	16.0					
US-101 Northbound Ramps at Garden Street							
Morning Peak Hour	9	21.3					
Evening Peak Hour 10		19.2					

As shown in **Table 12**, the maximum number of residential units that can be included in the proposed project before a significant cumulative project traffic impact is created at either intersection during either time period is 13 units. To mitigate the significant cumulative project impact at the US-101 Northbound Ramps at Garden Street intersection only, a total of 19 residential units could be constructed as part of the project.

PURCHASE PARKING ALTERNATIVE

Description of Alternative

This project design alternative would require some residents of the project to purchase a separate parking space from a common parking lot located beneath the residential units. Under this alternative design, Buildings 1 and 6 would remain as initially designed with direct access between residential dwelling units and tandem garages located on the ground level. Residents of these units would purchase both the unit and the attached parking garage at a slightly higher price than the units located in the remaining buildings.

Buildings 2 and 3 would be merged together to create a single structure extending from the northern edge of Building 2 to the southern edge of Building 3. The configuration would also be applied to Buildings 4 and 5, as shown in **Figure 10**. Each of the merged buildings would consist of three levels, with the residential units on the second and third levels and the ground-level used for parking. The residents of these buildings would be required to purchase two separate parking spaces located in the parking garages beneath each building and would not have direct access from their individual units. If a resident did not wish to purchase one or both parking spaces, they would not be allowed to park a greater number of personal vehicles than parking spaces they owned on the property.

The parking layout within Building 2-3, as shown in **Figure 11**, would include a total of 32 designated residential parking spaces, with 28 spaces provided via tandem parking stalls, and six visitor parking spaces. All parking spaces would be 20 feet in length, a minimum of 10 feet wide with a 30-foot drive aisle. Access would be granted via a new driveway from Calle Cesar Chavez at the site of the previously identified driveway in the original project alternative. The parking layout within Building 4-5 is shown in **Figure 12** and would also include 32 designated residential parking spaces in tandem stalls and 10 visitor parking spaces. These spaces would have the same dimensions as those described for Building 2-3. Access to this parking area would be provided via Montecito Street. The total number of parking spaces provided on the project site using this design would be 96 residential parking spaces and 18 visitor spaces. The project would then have a total of 114 parking spaces which would meet City code requirements.

The parking garage located within Building 4-5 would be accessed using a new driveway from Montecito Street located approximately 80 feet east of the existing driveway that the proposed project was to share for access to Buildings 4 and 5. Traffic operations at this new driveway are not expected to create any additional traffic impacts due to the limited number of vehicles expected to utilize this facility. Approximately one-third of the project's total residents would utilize this driveway when entering or exiting the project site. Using the trip generation estimates provided in **Table 3**, this would result in an expected traffic volume of seven vehicles during the morning peak hour and eight vehicles in the evening peak hour.

Traffic Impact Reduction Analysis

Under this alternative, it is assumed that residents who do not purchase parking spaces would not be allowed to park a personal vehicle on-site and would require alternative means to travel to/from the site. This alternative would decrease the number of cumulative project trips since these individuals would be forced to use alternative modes of transportation to travel to/from the project site. To ensure a conservative analysis, it was determined that the trip generation estimate associated with each residential unit that was "removed" (i.e., for each residential unit participating in the parking space purchase program) would be reduced to one-half its actual value to account for residents who only purchase one parking space, visitors trips, car and vanpool trips, deliveries and other activities that would still occur at the project site.



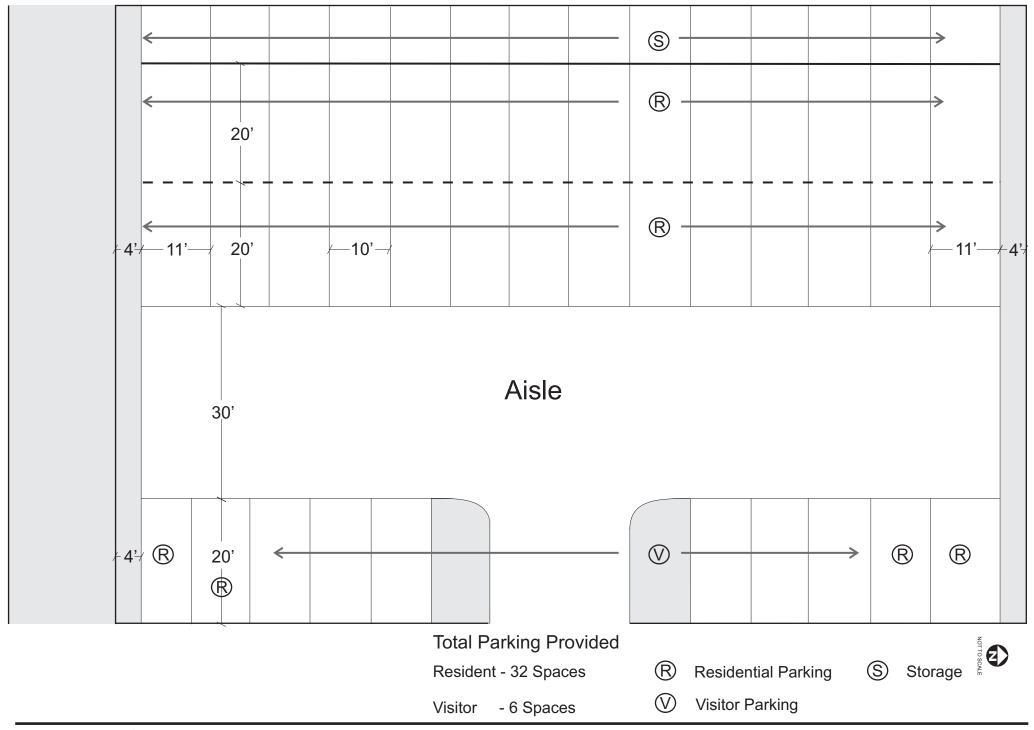
Combined Building Area and Driveway

- 1 42 parking spaces located below 16 residential units
- 2 38 parking spaces located below 16 residential units

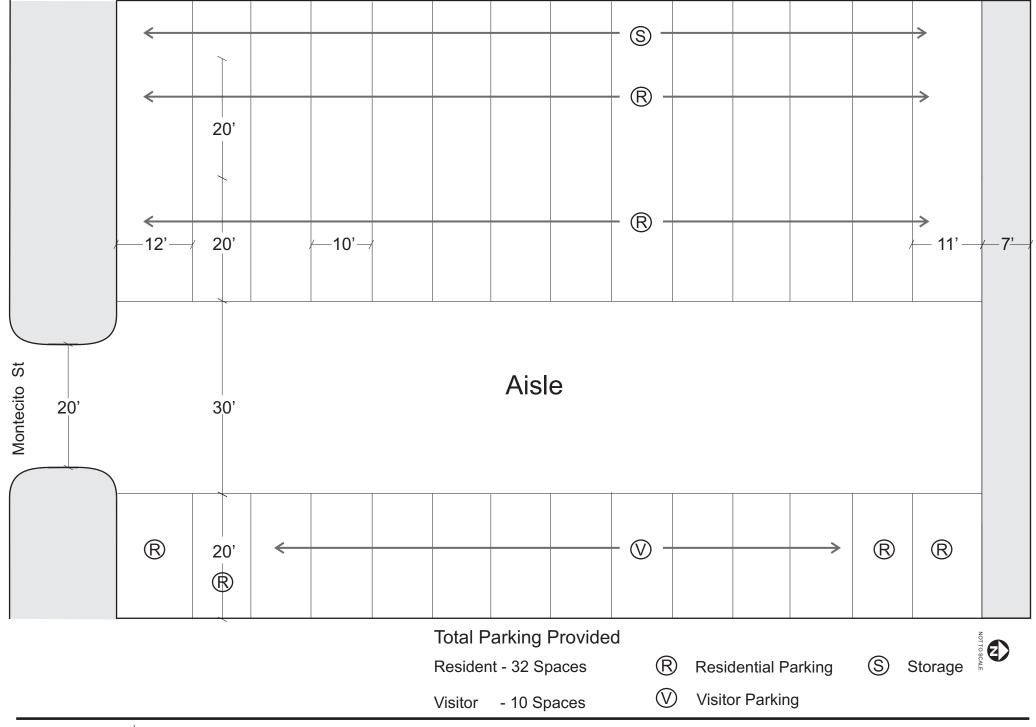
Not to Scale Source: Modified from Peikert Group Architects, 2007













Based on this analysis, the number of residential units that must participate in the parking space purchase program to reduce the project's significant cumulative traffic impacts to a less than significant level (i.e., add no more than four vehicle trips to the Gutierrez Street at Garden Street intersection) can be calculated by using an equation similar to that used in the Reduced Project alternative. The only difference between the two alternatives is that for each residential unit participating in the Purchase Parking alternative it was assumed that the unit would generate traffic similar to one-half of the traffic generated by a standard residential unit. Therefore, the estimated number of residential units that must participate in the Purchase Parking program would be twice the number of units removed as part of the Reduced Project alternative.

Based on this methodology, the values calculated as the maximum number of residential units that could be constructed under the Reduced Project alternative, as shown in **Table 12**, were reduced by half for each of the intersections and time periods. These values represent the maximum number of residential units that can be constructed as part of the project before a significant cumulative project impact occurs. **Table 13** shows the number of the proposed 48 residential units that must participate in the Purchase Parking program to reduce the cumulative project traffic impacts to a less than significant level.

TABLE 13: ESTIMATED NUMBER OF RESIDENTIAL UNITS THAT MUST PARTICIPATE IN THE PURCHASE PARKING ALTERNATIVE

Time Period	Peak Hour Trips Generated by Original Project	Estimated Number of Residential Units Required to Participate in Purchase Parking Program
Gutierrez Street at Ga	rden Street	
Morning Peak Hour	14	41
Evening Peak Hour	12	40
US-101 Northbound F	Ramps at Garden Street	
Morning Peak Hour	9	37
Evening Peak Hour	10	38

As shown in **Table 13**, the estimated number of residential units that must participate in the Purchase Parking alternative to reduce the project's significant cumulative project traffic impact to a less than significant level at either intersection during either time period is 41 units. To mitigate the cumulative-project impacts at only the US-101 Northbound Ramps at Garden Street intersection, a total of 38 residential units must participate in the Purchase Parking program. Since 16 residential units are expected to retain the attached garage configuration, only 32 of the proposed units could participate in the parking space purchase program. Therefore, this alternative may reduce traffic generated by the proposed project, but would not be capable of reducing the project's cumulative traffic impacts to a less than significant level.

HYBRID DESIGN ALTERNATIVE

This design alternative was analyzed using a combination of the trip reduction characteristics of the Reduced Project and Purchase Parking alternatives. The analysis conducted under this alternative involves two steps. First, the number of residential units opting not to purchase separate on-site parking spaces were estimated and the reduction in vehicle trip generation provided by the Purchase Parking alternative were calculated using the following equation:

$$\frac{\text{VTop}}{\text{TRop}} = \frac{\text{VTpp}}{\text{NP(TRpp)}}$$

where,

VTop = total vehicle trips generated by Original Project;

VTpp = total vehicle trips under Purchase Parking alternative;

TRop = total number of residential units in Original Project;

NP = 1 - (0.5 x (total number of residential units not purchasing parking spaces)

(total number of residential units in Original Project))

TRpp = total vehicle trips generated by Original Project;

total number of residential units in Original Project))

total number of residential units expected to purchase on-site parking

If this equation is applied to the morning peak hour conditions occurring at the Gutierrez Street at Garden Street intersection and 90 percent of the project's residents are expected to purchase on-site parking spaces, the number of vehicle trips the project is expected to generate are as follows:

$$\frac{14 \text{ veh. Trips}}{48 \text{ res. units}} = \frac{\text{VTpp veh. Trips}}{(0.95)(48 \text{ res. Units})}$$

$$\text{VTpp} = \frac{14(0.95)(48)}{48}$$

VTpp = 13.3 vehicle trips

The methodology developed for the Reduced Project alternative analysis is now applied using the total number of vehicle trips calculated under the Purchase Parking alternative analysis. The following equation was used in this calculation:

$$\frac{\text{VTpp}}{\text{TRop}} = \frac{\text{VTnsi}}{\text{TRhy}}$$

where,

VTpp = total vehicle trips generated by Purchase Parking alternative;

VTnsi = maximum vehicle trips generated by project that do not result in a significant cumulative project impact;

TRop = total number of residential units in Original Project;

TRhy = total number of residential units to be constructed under Hybrid Design alternative

Using the vehicle trips calculated from the Purchase Parking methodology, the maximum number of residential units that can be constructed before a significant cumulative project traffic impact occurs at the Garden Street intersection would be as follows:

<u>13.3 veh. trips</u> = <u>4 veh. trips</u> 48 res. units TRhy res. units

TRhy = $\frac{4(48)}{13.3}$

TRhy = 14.4 res. units

Using this two step approach, **Table 14** shows the maximum number of residential units that can be constructed before the project creates a significant cumulative project traffic impact for different levels of participation by residents in the Purchase Parking alternative. This analysis was conducted for both significantly impacted intersections.

TABLE 14: MAXIMUM NUMBER OF RESIDENTIAL UNITS UNDER A COMBINED PURCHASE PARKING/REDUCED NUMBER OF UNITS ALTERNATIVE

Resident Participation Level	Peak Hour Trips Generated by Original Project	Peak Hour Trips Generated After Implementation of Purchase Parking Alternative	Maximum Number of Residential Units Allowed
Gutierrez Street at	Garden Street - Mornir	ng Peak Hour	
 10 Percent 	14	13.3	14.4
20 Percent	14	12.6	15.2
30 Percent	14	11.9	16.1
 40 Percent 	14	11.2	17.1
 50 Percent 	14	10.5	18.3
Gutierrez Street at	Garden Street - Evening	g Peak Hour	
10 Percent	12	11.4	16.8
20 Percent	12	10.8	17.8
30 Percent	12	10.2	18.8
 40 Percent 	12	9.6	20.0
 50 Percent 	12	9.0	21.3
US-101 Northbound	d Ramps at Garden Str	eet - Morning Peak Hour	•
10 Percent	9	8.6	22.3
20 Percent	9	8.1	23.7
30 Percent	9	7.7	24.9
40 Percent	9	7.2	26.7
50 Percent	9	6.8	28.2
US-101 Northbound	d Ramps at Garden Str	eet - Evening Peak Hour	
10 Percent	10	9.5	20.2
20 Percent	10	9.0	21.3
30 Percent	10	8.5	22.6
40 Percent	10	8.0	24.0
50 Percent	10	7.5	25.6

As shown in **Table 14**, the number of residential units that can be constructed and reduce the project's cumulative traffic impact to a less than significant level varies depending upon the number of residents who purchase parking spaces. If all the residents decide to purchase parking spaces, the Purchase Parking reduction is not longer valid and this alternative would be similar to the Reduced Project alternative. Conversely, if all residents did not purchase parking spaces, the maximum number of units that can be constructed without creating a significant cumulative project traffic impact at either intersection with Garden Street would be 27 units.

TRAFFIC SIGNAL WARRANT ANALYSIS

The justification for the installation of a traffic signal at an intersection is based on warrants stated in the Caltrans *Traffic Manual* and the *Manual on Uniform Traffic Control* Devices, published by the Federal Highway Administration. Traffic conditions at an intersection must meet specific warrants, or criteria, before a traffic signal is considered necessary. This process is not the only manner in which a traffic signal can be justified for installation, but it is the most widely recognized and followed.

A traffic signal warrant analysis was conducted for the Gutierrez Street at Olive Street intersection during each scenario. The results of this analysis showed that the traffic conditions at this intersection did not satisfy the minimum requirements for either the Peak Hour Volume or Peak Hour Delay warrants in any of the scenarios analyzed. The analysis worksheets for these warrants are provided in **Appendix D**.

A review of the collision history occurring at this intersection was also conducted, as detailed in the following section, and it was determined that the conditions occurring at this intersection did not satisfy the Crash Experience warrant either.

COLLISION HISTORY REVIEW AND ANALYSIS

A review of the collision history at the intersection of Gutierrez Street and Olive Street was conducted as a part of this traffic impact analysis. Based on collision data provided by the City of Santa Barbara, a total of 30 collisions have occurred at this intersection between 1/1/1989 and 12/31/2006, as shown in **Figure 13**.

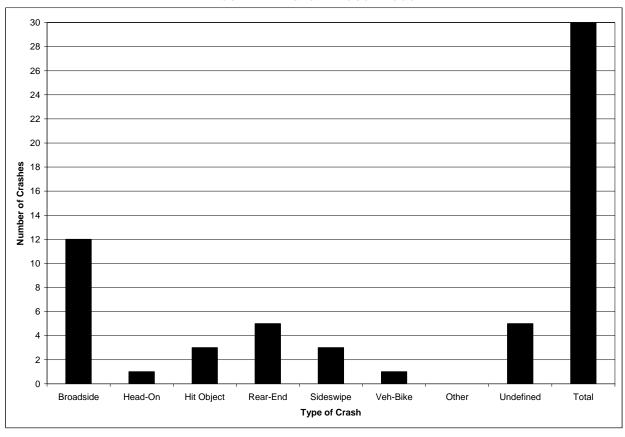


FIGURE 13: GUTIERREZ STREET AT OLIVE STREET ACCIDENT HISTORY 1989 - 2006

Of this total, twelve were broadside-related collisions with five collisions resulting from vehicles traveling in the northbound direction along Olive Street and four in the southbound direction. The three remaining collisions resulted from vehicles attempting to enter the westbound traffic flow from an on-street parking space located along Gutierrez Street. In addition to broadside-related collisions, this intersections has also experienced five rear-end collisions with one occurring in the northbound direction and two in both the southbound and eastbound directions. The collision data obtained from City staff is provided in **Appendix E**.

Currently, this intersection is stop-controlled in the northbound and southbound approaches along Olive Street, with traffic traveling westbound along Gutierrez Street unimpeded. More than half of the collisions occurring at this intersection involve vehicles either attempting to cross Gutierrez Street or vehicles stopping to avoid a collision with a vehicle traveling along this street. Based on the type and number of collisions occurring at this intersection, it would appear that vehicles entering this intersection from Olive Street are having difficulty seeing traffic traveling westbound on Gutierrez

Street and are either being hit broadside by these vehicles or are being rear-ended by vehicles behind them when they stop to avoid a collision with a vehicle on Gutierrez Street.

A field review of this intersection showed that the existing building located in the southeast corner of the intersection obstructs the sightline for vehicles traveling northbound on Olive Street. In addition, several trees and utility poles are currently located immediately behind the curb on both sides of the street, especially along the southern edge of Gutierrez Street. To further complicate the situation, on-street parking is also allowed along both sides of the street within close proximity to the intersection. These obstructions are not providing vehicles traveling on Olive Street a clear view of oncoming traffic. As a result, these vehicles must pull forward up to and sometimes beyond the edge of Gutierrez Street to have a clear view of oncoming traffic. Vehicles that do not pull this far forward must attempt to cross Gutierrez Street relying on only partial or incomplete visual information regarding the speed and volume of oncoming traffic.

A preliminary analysis of this intersection identified the following alternatives that could be implemented at this intersection to help reduce the possibility of broadside and rear-end collisions:

- Reduce the speed limit along Gutierrez Street, restrict parking for 250 feet east of Olive Street and install appropriate warning signage, striping and flashers upstream from Olive Street; or
- 2. Remove or relocate all trees and utility poles and restrict parking along both sides of Gutierrez Street within 250 feet east of Olive Street.

Based on experience from similar intersection configurations, the installation of a traffic signal has been shown to significantly reduce the occurrence of both broadside and rear-end collisions, but additional and more detailed analysis would need to be conducted before this improvement could be recommended.

It should be noted that the proposed project will add additional traffic at this intersection, but the incremental increase in vehicles is not great enough to significantly increase the possible occurrence of a vehicle collision.

SITE ACCESS AND CIRCULATION ANALYSIS

The proposed project will have three separate points of access, two driveways located along Calle Cesar Chavez and one along Montecito Street. The two driveways fronting onto Calle Cesar Chavez will serve the 32 residential units located in Buildings 1, 2, 3 and 6 and are expected to sufficiently accommodate the project-related traffic volumes. The driveway located along Montecito Street will be a shared with the land uses located immediately adjacent to the west of project site and will provide access to the remaining 16 dwelling units. Due to the low number of project-related vehicle trips forecast to be generated by the proposed project, this facility is also expected to fully accommodate project traffic volumes with no adverse affects to existing traffic operations.

SHORT-TERM CONSTRUCTION IMPACT ANALYSIS

There are two phases of construction that are generally considered to have the greatest potential to impact traffic operations in the areas surrounding the project site: clearing and grading. During these two phases, the site must first be striped of all obstructions and debris that would interfere with the overall development of the site. Next, the site is then graded and shaped so as to accommodate the proposed project in terms of structural support, drainage and landscaping. These phases also result in the need for debris and excavated soil to be removed from the site using dump trucks.

The following conditions must be met before the City will approve a construction traffic control plan that would be implemented for this project:

- All construction equipment, material and activities must remain on-site and any street closures that would still be needed would be limited to a few days per event.
- Designated haul routes for all construction-related trucks, three tons or more, must be approved by the Transportation Engineer and that these trips could not be scheduled during peak hours (7:00 am to 9:00 am and 4:00 pm to 6:00pm).
- All construction-related vehicles must be parked on-site or at an off-site facility approved by the Public Works Director.
- Deliveries of construction materials or supplies that would require a street closure must be approved by the Transportation Manager and shall not remain in the public right of way for longer than a few days.

A preliminary construction schedule incorporating these conditions was developed and is provided in **Appendix G**. The site clearing and grubbing phase is expected to require a total of five workers and two days to complete. During this phase, it is estimated that a total of eight truck load round trips, approximately 120 cubic yards, of debris will be removed from the project site. Based on this information, this construction phase is expected to generate no more than ten peak hour trips (five in both the AM and PM peak hours) and a total of eighteen daily trips. The peak hour vehicle trips would be restricted to workers traveling to and from the site each day. The remaining eight daily trips would be dump trucks traveling to the site and removing debris. These trips would occur throughout each day of the two day period.

The amount of construction-related traffic will increase during the grading phase. This phase is expected to require six workers and four weeks to complete. An estimated 1,800 cubic yards of soil will be imported to the site, requiring approximately 90 truck load round trips. Under these conditions, this construction phase is expected to generate a maximum of twelve peak hour trips (six in both the AM and PM peak hours) and an average of twenty-one daily trips. The peak hour trips would again be made by workers traveling to and from the project site. The remaining nine daily trips would be dump trucks traveling to and from the site while importing the needed soil.

Generally, construction activities associated with the proposed project are expected to contribute approximately eleven vehicle trips in both the morning and evening peak hours for a period of time lasting approximately four weeks. Due to the limited number of peak hour trips being generated and the short duration in which these trips are expected to occur, no construction-related traffic impacts are expected to occur.

CONGESTION MANAGEMENT PROGRAM ANALYSIS

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the Santa Barbara County Association of Governments (SBCAG). The CMP for Santa Barbara County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. This section describes the analysis of project-related impacts on the CMP system.

Based on the information provided in **Table 3** of this report, the proposed project is expected to generate a total of 281 daily trips, 21 morning peak hour trips and 25 evening peak hour trips. These values fall far short of the CMP thresholds of 50 peak hour or 500 daily trips. Therefore, no further CMP analysis is required.

APPENDIX A

EXISTING TRAFFIC COUNTS

(AS PROVIDED IN ICU WORKSHEETS IN ATE'S APRIL 12, 2007 STUDY)

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CONTROL TYPE: VOLUMES NO ENSTRUCI (B) PROJECT/ODED CO CUMULATIVE	CONTROL TYPE: SIGNAL VOLUMES N EXISTING: 405 (B) PROJECT-ADOED 0 CC CUMULATIVE 453 (C) CUMULATIVE 0 NOR: LANE GEOMETRICS CLANE GEOMETRICS SCENARIO 1 – EXISTING YOLUMES WA SCENARIO 3 – CUMULATIVE CO SCENARIO 4 – CUMULATIVE FROJECT SCENARIO 4 – CUMULATIVE FROJECT SCENARIO 4 – CUMULATIVE FROJECT	CONTROL TYPE: SIGNAL VOLUMES IN EXSTING: (B) PROJECTADED (C) CUMULATIVE (B) PROJECTADED (C) CUMULATIVE (C) COMPANIO 3 — CUMULATIVE (C) COMPANIO 4 — CUMULATIVE (C) COMPANIO 5 — CUMULATIVE (C) COMPANIO 5 — CUMULATIVE (C) COMPANIO 6 — CUMULATIVE (C) COMPANIO 7 — COMPANI	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUTH L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUTH BOUND TRAFFIC YOU SOUTH BOUND TRAFFIC YOU	TRAFFIC YOLUME SUMMARY DOTH BOUND EAST BOUND						
N 51	P TING VOU AULATIVE FE	NORTH BG 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUTH	1 BOUR	5 °	VAMABY			100		
	P TING VOID	465 500 6 453 608 6 453 608	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	o o o o o o		;	ST BOUI	₽ ≈		WEST BOUND T	~	
	TING VOLU TING + PRC AULATIVE (-)	NORTH BC L TT MES (A) SIECT VOLUN PROJECT VO	UND RES(A+B)	SOUTH	0	644 0 3 0 746 0	0 0 0	• 0	\$1\$ 0 139	000	210 0 272	
A. 1986年 1988年 1987年 1988年 19	TING VOLU TING + PRC AULATIVE (C	NORTH BC L TT MES (A) MES (A) PROJECT VOLUN	ES(A+B)	SOUTH	CE	GEOMETRICS		100				Salar Salar
LANE GEOMETRICS	TING VOLU	MES (V) S) PROJECT VOI	IES(A + B)	F	SOUTH BOUND TT R		EAST BOUND	ð	*	WEST BOUND L R	۵	
	TING VOLU	MES (A) SIECT VOLUN D PROJECT VOI	FS(A + B)		TRAFFI	TRAFFIC SCENARIOS	SO	4.70	274,184	100		
		ļ		LEVEL (¥ SERV	LEVEL OF SERVICE CALCULATIONS	ULATION	2	ŀ			
MOVE. # OF		200		SCEN.	SCENARIO VOLUMES	LUMES	_		,	SCENARIC	SCENARIO VIC RATIOS	
	Ļ	CARACHE	- 4	7 26	r 5	• 5			7			
	- 1.7	3200	580	586	688	694		0.181	0.183	0.215	0.217	
NBR 0		0	0	0	٥	0						
0 185		0	0	0		0						
SBR (a)	` <u>-</u>	1600	489	492	295	777		0.306	0.308	0.354	0.356	
		0	o	ō	D	0						····
EB7 0				0 0	0 0	0 0					, ,	
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wer o		001	9	0		92		0.072	0.072	0.087	0.087	
(q)	_	1600	10.2	107		139		0.067	6.067	0.087	0.087	
						LOST TIME:		0,100	001.00	a.100	. 001.0	
		<u>τ</u>	AL INTERS	ECTION C	APACITI	TOTAL INTERSECTION CAPACITY UTILIZATIONS SCENARIO LEVEL OF SERVICE:		0.616 B	0.616 8	0,697 B	169°0	
NOTES: RTOR:	(a) 24% (b) 49%											

7.7

	A.M. PEAK HOUR GARDEN US 101 SB RAMPS SIGNAL	JULY 2005 A.M. PEAK HOU GARDEN US 101 SB RAMI SIGNAL	COUNT DATE: 101Y 2005 TIME PERCOD: A.M. PEAK HOUR CARDEN CARDEN CONTRET: 05 701 58 AAMPS CONTROL TYPE: SIGNAL		į								:	
					I	AFFIC	VOLUA	TRAFFIC VOLUME SUMMARY	MARY					
VOLUMES		L NO	NORTH BOUND	g ~	ğ .,	SOUTH BOUND	2 ~	EAST	EAST BOUND	۵ س	≶ 	WEST BOUND	2	
(A) EXISTING: (B) PROJECT-ADDED (C) CUMULATIVE	æ	0	319	52	2267 267	278 	•	523	0	382	• •	0 0	• •	
						"	GEOMETRICS	Z ICS						
LANE GEOMETRICS		NOR	NORTH BOUND T TR	S.	TUOS.	SOUTH BOUND LL T	QV.	EAST	EAST BOUND L LTR R	2.5	3	WEST BOUND	Q.	
						TRAF	FIC SCE	TRAFFIC SCENARIOS						:
SCENARIO 2 - EXISTING + PROJECT VOLUMES(A+B) SCENARIO 3 - CUMULATIVE (G) SCENARIO 4 - CUMULATIVE + PROJECT VOLUMES (B+C)	STING + PRC MULATIVE IC MULATIVE +	JECT W	J. VOLU	S(A+B)	φ									
MOVE. # OF	ļ	XEC 4945	-	-	Ŋ,	SCENARIO VOLUMES	OLUME	SCENARIO VOLUMES	-	,	,	SCENARIC	SCENARIO VIC RATIOS	
-	<u> </u>	۰	 		-	0			-		<u>.</u>	<u>L</u>		
(a)	m 	3200		319	319	361	361		-	0.115	0.115	0.129	0.129	
-	M #	3200		226	227	315	315		• •	0.077 *	0.071 •	0.083	0.197	•
		ه د		523	524	265 0	266 0							
EBT 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	# ¥	3200		235	235	256	256			0.163	0.364	0,150	0,177 ·	
	_	0		0	Ċ	0	0		<u> </u>				•	
WBT 0		00		0 0	0 0	0 0	0 0					. ,		
							LOST TIME	riME	9	0.300	0.100	0.100	001.0	
			TOTAL	INTERS	CTION	SECTION CAPACITY UTILIZAT SCENARIO LEVEL OF SERVICE:	TY UTALL: OF SERVI	TOTAL INTERSECTION CAPACITY URLIZATION: SCENARIO LEVEL OF SERVICE:		0.449	0.450	6.489	0.490	
NOTES: RTOR.	(a) 6% (b) 33%													

NATING COLVERNING COLV	
FAMER NORTH BOUND STATE COLUME STRONMARY	
CAPACITY	WEST BOUND
CEOMETRICS NORTH BOUND SOUTH BOUND EAST BOUND EAST BOUND LT TR L	
NORTH BOUND SOUTH BOUND SAST BOUND FAST BOUND	
ARIO 1 - EKSTING VOLUMES (A) ARIO 2 - ENSTING PROJECT VOLUMES (A + RO) ARIO 3 - CUMULATIVE + PROJECT VOLUMES (B + C) ARIO 4 - CUMULATIVE + PROJECT VOLUMES (B + C) ARIO 4 - CUMULATIVE + PROJECT VOLUMES (B + C) ARIO 5 - CAPACITY	WEST BOUND
MARIO 1 – EKISTING VOLUMES IA.) ARRO 2 – EKISTING PROJECT VOLUMES (8+C) ARRO 3 – CUMULATIVE (C) ARRO 4 – CUMULATIVE (C) ARRO 5 – CUMULATIVE (C) ARRO 6 – CUMULATIVE (C) ARRO 7 – CUMULATIVE (C) ARRO 8 – CUMULATIVE (C) ARRO 9 – C 0 – C	
FOR THE OFF SERVICE CALCULATIONS 1 STEPLARIO VICTUALS 1 STEPLARIO CAPACITY UTILIZATIONS 1 STE	
CAMPACITY CAMP	
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1	
2 3200 453 453 524 524 0.142 - 1600	0.209 0.244 0.244 1
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.164
0 0 379 383 436 442	0.250 0.250
1 1000 11 11 12 12 0.122 1 1000 11 11 12 12 0.069 0 0 0 0 0 0 0 0 0	•
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1069 0.079 0.079
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
TOTAL INTERSECTION CAPACITY UTILIZATION: 8.573 SCENARIO LENE, OF SPENCE: A	
TOTAL INTERSECTION CAPACITY UTILIZATION: 0.573 SCENARIO LEVEL OF SFEVICE: A	180 • 0.100 • 0.100
l	575 0.648 0.650 A 8 8
RTOR. , (a) 21% (b) 60%	

City Traffic Counters (626) 256-4171

File Name: OliveGut Site Code: 00000000 Start Date: 1/15/2008 Page No: 2

File Name: OliveGut Site Code: 00000000 Start Date: 1/15/2008 Page No: 3

City Traffic Counters (626) 256-4171

App. Total

Southbound hrou pinht Ap	8	d	40	Westbound	Westbound hrou picht	App.	F. 401	Nort Prou	pound	App.	40	East Throu	Eastbound	App.	별
Peak Hour From 07-00 AM no 11-45 AM . Peak 1 of 1	Total	130		gh	116	Total	3	등	P	Total	Ē	46	100	Total	Total
	· · · ·														
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															0.947
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0.819	813					0.886				0.750					

Figure Through Left	Gullerez St Out In Total O	+ teon + 1
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51 162 in Total

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Gutternez St	Eastbound	Right			0	9	0											
Gutter	East	Throu			Ç	0.0	0					Γ						
		Left			c	0.0	0											
		App.			11		40			40	0.694							
ž,	puno	Right			0	0.0	0			0								
Oive St	Northbound	Left Throu	2		27	24.3	6		Σ	o		-						
		Left			84	75.7	3,		05:00 PM	31		1	88	۲-	↲	ĕ.	Ĵ	
	_	App. Total			743		194			194	756.0	Olive St			72 67	Right Throug	-	->
Gutternez St	Westbound	Right			45	5.7	10			9		č	3			Š.	Ţ	
Ontlier S	West	마바			689	92,7	178		Σ	178		_					_	
	1	Left	of 1		12	1.6	9		05:00 PM	ဖ								
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ر دون	Southbound	Right	45 PM -		172	72.0	48			4								
Olive	South	nou d	M to 05	>	29	28.0	17		>	2								
	-	Left	12:00 P	04:15 PI	0	0.0	0		04:45 PM	0								
		Start Time Left Throu Right App.	eak Hour From	Intersection 04:15 PM	Volume	Percent	05:00 Volume	Peak Factor		Volume	Peak Factor							

299 1093

	Out 10 70tal	
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	ha guardin ng	

MARES EXENTING: PROSECTADDE CUMULATIVE CUMULATIVE CONTENCS GEOMETRACS GEOMETRACS TO 4 CUM NRIO 4 - CUM NRIO 4 - CUM NRIO 4 - CUM NRIO 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NORTH BOUND RISHING:					
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CEONAETRICS	NORTH BOUND NORTH BOUND I T NOT ENSTING VOLUMES (A) RIO 2 ENSTING VOLUMES (A) RIO 3 CUMULATIVE (C) RIO 4 CUMULATIVE (C) RIO 5 CUMULATIVE (C) RIO 6 64 1 1660 64 1 1660 64 1 1660 64 1 1660 64 1 1660 64 1 1660 64 1 1660 64 1 1660 64 1 1660 73 1 1660	GEOMETRICS				
TRAFFIC SCENARIOS A	RRO 1 – EXISTING VOLUMES (A) RRO 3 – CUMULATIVE (C) RRO 4 – CUMULATIVE (P) RRO 6 – CUMULATIVE (P) RRO 6 – CUMULATIVE (P) RRO 7 – CUMULATIVE (P) RRO 6 – C) RRO 6 – C) RRO 7 – CUMULATIVE (P) RRO 6 – C) RRO 6 – C) RRO 7 – CUMULATIVE (P) RRO 6 – C) RRO 7 – CUMULATIVE (P) RRO 7 – C) RRO 6 – C) RRO 6 – C) RRO 7 – C) RRO 7 – C) RRO 6 – C) RRO 7 – C) RRO 7 – C) RRO 6 – C) RRO 7 – C) RRO 7 – C) RRO 7 – C) RRO 7 – C) RRO 6 – C) RRO 7 – C)		T BOUND	WE	ST BOUND ET T	
RRIO 2 - ENSTING VOLUMES (A) RRIO 2 - ENSTING PROJECT VOLUMES (A + B) RRIO 3 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 4 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 4 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 5 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 6 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 7 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 7 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 8 - CUMULATIVE + PROJECT VOLUMES (B + C) RRIO 9 - CUMULATIVE + PROJECT VOLUMES (B + C)	RRIO 1 – EXISTING VOLUMES (A) RRIO 2 – EKISTING YOLUMES (A) RRIO 3 – CUMULATIVE (C) RRIO 4 – CUMULATIVE + PROJECT VOLUMES (B+ LANES 1 1 1600 64 0	AFFIC SCENARI	sc			
FOF LANIS CAPACITY 1 2	P OF LANES CAPACITY 1 1 1 1 1 1 1 1 1	CIVOLOROS	PATIONS			
1 1600 62 65 65 77 0.040 0.041 0.041 0.041 0.041 0.044	1 1 1600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	VOLUMES		,	SCENARIO	VIC RATIOS
1 1600 64 62 65 69 0.040 0.042 0.041 0.043 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.039	- 1100	. 1900	. 9908
1 1600 127 128 134 135 131 0,111 0,112 0,118 0,18 0,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. •	0.040	0.042	0.041	0.043
(a) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2		. ;		
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0	0.000	p 6		,		
0 0 0 44 45 46 47 0.194 0.194 0.207 2 3200 257 257 354 394 0.194 0.194 0.197 2 3200 257 257 394 394 0.194 0.197 2 3200 20 20 21 21 2 20 20 21 21 3 40 40 40 4 4 4 4 4 5 4 4 4 5 4 5 4 6 13%	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0			. ,	
TOTAL BYTERSECTION CAPACITY UTILIZATION: 6.444 6.449 6.416 6.913%	0	47		—,	0.307	. 202.0
1007 TME: 0.100 • 0.10		21			,07.0	0.407
TOTAL BYBESECTION CAPACITY UTILIZATION: 0.444 0.449 0.466 SCENARIO LEVEL OF SERVICE: A A A A A A A (5) 13%		LOST TIME:	0.100	0.100		0.100
RTOR;		CITY UTILIZATIO IL OF SERVICE:		0.449	0.466 A	0.471 A

CONTROL TYPE:	IIME PERIOD: N/S STREET: E/W STREET: CONTROL TYPE:	OCTOBER 2006 P.M. PEAK HOUR CALLE CESAR CHAYEZ GUTTERREZ SIGNAL	COUNT DATE: OCTOBER 2006 THAT PREDO: PALK PEAK HOUR NAS STREET: CALLE CESAR CHAVEZ EVW STREET: GUTTERREZ CONTROL TYPE: SIGNAL									
			11	TR	AFFIC 1	TRAFFIC VOLUME SUMMARY	MMARY					
VOLUMES	į	NOR I	NORTH BOUND	50, 1	H 80	ND %	EAST BOUND	~ ~	Ā 	WEST BOUND T	~	
(A) EXISTING: (B) PROJECT-ADD (C) CUMULATIVE	EXISTING: PROJECT-ADDED CUMULATIVE	3. E	96 6 2 0 103 0	600	Z S	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000	000	28 1	438	33	
					5	GEOMETRICS						
LANE GEOMETRICS	ETRICS	NORTI	NORTH BOUND	Sour	SOUTH BOUND TR		EAST BOUND		W	WEST BOUND LT T		
					TRAFF	TRAFFIC SCENARIOS	sc					
SCENARIO 1 SCENARIO 2 SCENARIO 3 SCENARIO 4	- EXISTIP - EXISTIP - CUMU	SCENARIO 1 – EXISTING YOLUMES (M) SCENARIO 2 – EXISTING + PROJECT VOLUMES(A+B) SCENARIO 3 – CUMULATIVE (G) SCENARIO 4 – CUMULATIVE + PROJECT VOLUMES (B+C)	DEUMES(A+B	+ 1		7.	S					
MOVE-	* OF	CAPACITY	-	EVEN N	SCENARIO VOLUMES	SCENARIO VOLUMES 2 3 4	- NOIN	,	,	SCENARIO	SCENARIO V/C RATIOS	
īg2	-	1500	7.4	77	8	. %	°	0.046	0.048	0.052	0.054	
NBT NBR	- 0	1600 0	* °	86 0	103	105 0		090.0	0.061	0.064	0.066	
581		0		٥	٥	ъ						
SBT (a)	~ ' 0	1600 0	57	57 25	8 8	96		. 880.0	0.093	0.094	• 660'0	
101	00	00		• •	0.0	0 0			,			
EBR	0	0	-						,			
WBL	-	0	28	53		30						
WBR (b)	0	9	30 (4)	10	32	465 32	g ,	0,155	0,155	0.171	. 1210	
						4OST TIME	-6	0.100	0.100	0.100	0.100	
			TOTAL INTERSECTION CAPACITY UTILIZATIONS SCENARIO LEVEL OF SERVICES	ECTION (SAPACITI LEVEL O	SECTION CAPACITY URLIZATION SCENARIO LEVEL OF SERVICE:		0.189 A	0.396 A	0.417	0.424 ^	
NOTES	RTOR: (a)	, (a) 33% (b) 19%										
	•											

APPENDIX B TRAFFIX ANALYSIS WORKSHEETS

EXISTING CONDITIONS

Page 2-1		Change in	000 V/C	000 V/C	300 V/C	N00 D/V	00 V/C
Рад		ซี	+ 0.1	0 +	+ 0.0	+ 0.0	+ 0.0
9		Future Del/ V/	LOS Veh C B xxxxx 0.672 + 0.000 V/C	A xxxxx 0.555 + 0.000 V/C	A XXXXX 0.449 + 0.000 V/C	C 15.5 0.000 + 0.000 D/V	A xxxx 0.444
Wed Feb 20, 2008 15:46:16 Existing AM Peak Hour City of Santa Barbara	Montecilo Condos Kestuay	Base Del/ V/	LOS Veh C B xxxxx 0.672	A xxxxx 0.555	A XXXXX 0.449	c 15.5 0.000	A xxxx 0.444
Wed Feb Z	Montecire Impact ? Leve]		n St	d Garden St	d Garden St	live St	alle Cesar C
ng AM		Intersection	1 Haley St and Garden St	3 US-101 NB Ramps and Garden St	4 US-101 SB Ramps and Garden St	5 Gutierrez St and Olive St	6 Gutierrez St and Calle Cesar C $ ext{A}$ xxxxx 0.444 $ ext{A}$ Xxxxx 0.444 + 0.000 V/C
Existing AM	; ; ;	Inters	# T H	# 3 O	# 4 U	# 5	ڻ پ

Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to MMA, LOS ANGELES, CA

		i Q	Existing	ng AM	Peak	House Property	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			City of Montecito		e de la se				
######################################	**************************************	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Of Services	Vice Compi	15 .*	1 1 1 1	1 1 8 *	Alternative)	* * * * * * * * * *
******		********	and Garden St	****	* * * *	*************	*****	*******	*****
Cycle (sec): Loss Time (sec) Optimal Cycle:	r	100 10 (Y+R=0 47	۰. :	sec)	Critical Average Level Of	·	Vol./Cap.(X): elay (sec/veh): Service:		0.672 xxxxxxx
Street Name: Approach: Movement:	North - 1	Sarde nd R	St. So.	, mi	Bound	East L - T		st St West L - T	Bound
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 0	tred lde lde l	1 0 E	Permitted Include 0	ted de 0	Per In In	Permitted Include 0 0	Dermino 0	Permitted Include 0 0
Volume Module:					-				
Base Vol:	0 313	378	37	325	0 0	20 392	τ	0 6	
Bse:	4	378	•	325	0	202	92 168	1.00.1 0	0 T 0
Added Vol:		0	0	0	0			0	0
PasserByvol: Initial Fut:	0 0	378	37	325	00	20 3		00	00
: Adj: 1			1.00	1.00	0,	100.	.00 0.92	1.00 1	Н
PHF Adj: 1 PHF Volume:	.00 I.00 0 313	359	1.00	325	1.00	1.00 1.		1.00 1.0	0 1.00
Reduct Vol:			0	0	0	0 0		0	
Reduced Vol: PCE Adj: 1	0 313	359	37	325	1.00	20 3	392 155	1.00 1.0	-
: 1 lume:		\vdash		325		.00 1 20		1.00 1.	i
on Flo	18			F 		1	1		
Sat/Lane: 10	600 1600	1600	1600	1600	1600	1600 16	600 1600	1600 1600	
	10	0.53		1.80	0.00	140	1	- 0	0.00
Capacity Analys	ysis Modul	e:	-		1			1	
		0.42	0.02	0.11	00.0	0.01 0.13	13 0.10	0.00 0.00	0.00
Crit Moves: **** ****************	****	****	**********	***	***	****	***	****	*

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

Page 4-1

Wed Feb 20, 2008 15:46:16

Existing AM

	AM PEAK HOUR LUME V/C	0.090 0.359 * 0.000	0.000 * 0.126 0.000	0.000 0.000 0.000	0.083 0.361 * 0.167	0.359 0.361 0.000 0.100 0.820	SOT	ΚВООшк
oject	AM PEA VOLUME	288 575 0	0 387 15	000	132 577 267			0.600 0.700 0.800 0.900 1.000
as" Pr							<u>ე</u>	1 1 1 1 1 1
Street								0.100 0.601 0.701 0.801 0.901
535 E. Montecirio Street "Los Portales" Project Existing AM Conditions Guilerrez Street at Garden Street 02/12/08						nts ants ponent ance		
535 E. Mont Existing AM Gulleriez St 02/12/08	CAPACITY	3200	3200		1600 1600 1600	NS Movements E/W Movements Rt. Turn Component Yellow Clearance TON/(ICU)		
100	LANES	2 - 0	070	000		N Y Y UTILIZATI GE (LOS)		
PROJECT- AVALYSIS CONDITION INTERSECTION: DATE OF ANALYSIS	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBL EBLT EBTR	WBL WBT WBR	N/S Mover E/W Mover Rt. Tum Cc Yellow Clec Yellow Clec TOTAL CAPACITY UTLEZATION (ICU)		

ICU 1(Loss as C) ************************************	ss as Cycle Leng ************************************	Level Of Service Computation Report	Service Computation th %) Method (Future ************************************	omputation Fortune (Future ************************************	on Rep	Report Volume A	Alternative)	.ive)	* *
ion #3 **** (Sec) Ycle: *****	01 NB R	* * * * * * * * * * * * * * * * * * *	* * *	*					
(Sec): (Sec) Ycle: *****	100 10 37 ***** G. G. G. G. C.	· * a 님	* *		****	****	*****	*****	****
	Bou Ferm Serm 100	(N 14)		Average 1 Level Of	Vol./Cap Delay (se	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service:		0.555 xxxxxx	255 A A
	. 01	-	t South Bound - T -	بر س	E E E E E E E E E E E E E E E E E E E	US-101 Bound T - R		_	Bound
Control: Prot+ Rights: In In Min. Green: 0 Lanes: 1 0		0	Permitted Include 0 2 0	1 0 T	Per O 0	Permitted Include 0	: 	Permitted Include 0 0	ted de 0
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l Sat.: 1600	3200 (0 03	Н	009	0	0	0 1580		1600
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6:16 Page 5-1	ır ra ıdy	Report		US-101 SB Ramps st Bound West Bound T - R L - T -	Permitted Permitted Include 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.00	0.16 0.00 0.15 0.00 0.00 0.00 ****
Wed Feb 20, 2008 15:46	Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	Of Serv Length % *******	**************************************	rden St South Bound R L - T - R	ed Protected o Include 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.00	: 0.11 0.07 0.17 0.00 0. ****
Existing AM		ICU 1(Loss as C	**************************************	North Bou L - T -	Control: Permitted Rights: Include Min. Green: 0 0 1 1 Lanes: 0 0 1 1	dj: 1.00 1.00 319 dj: 1.00 1.00 dj: 1.00 1.00 vol: 0 319 chi 1.00 1.00 vol: 0 319 di: 0 0 1.00 dime: 0 319 di: 0 0 1.00 dif 0 319 di: 0 0 1.00 dif 0 0 0 0 1.00 dif 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Capacity Analysis Module: Vol/Sat: 0.00 0.11 (Crit Moves: ****

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			ž	Montecito		Condos Restudy	estudy					
Level Of Service Computation 2000 HCW Unsignalized Method (Future Vol ************************************	2000 HCM *******	Lev HCM Unsig ************************************	Level (Signal: *****	Level Of Service Unsignalized Method	Service dethod	Computation (Future Vo	ation re Vol	on Report	1 0 * 4	(0 × 1	* * * * * * * * * * * * * * * * * * *	
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Street Name: Approach: Movement:	North L - 5	h Bo	Olive Bound	ve St L	t South B	Bound l - R	₽	East Be	Gutierrez Bound	ו פרד: גד	1 B	id R
Control: Rights: Lanes:	Sto I	top Sign Include	de 0 0	\$ 0	Stop Sign Include	ign ude 1 0		Uncontrolled Include 0 0 0 0	olled ude	Uncontrolled Include	ontroll Include	led 0
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	500	22	000								547	20
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Critical Gap Critical Gp: Critical Gp: FollowUpTim:	Module 7.1	6.5	XXXXXX	XXXXX	6.5	3.3	XXXXXX	XXXX	XXXXX	4.1 xx	X XXXX	XXXXX
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	Of Service Module: tho: xxxx xxxx x	odule xxxx		X		- XXXX	: XX		XXXXX		X XXXX	
Control Del:xxxxx			× *	XXXXX			XXXX *		*	4		XXXXX
Movement: Shared Cap.:	, ~		- RT XXXXX			1		•	- RT XXXXX	, ×		- RT XXXXX
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ApproachDel:	-	4. B			15.5)	×	*		8	××	:
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Wed Feb 20, 2008 15:46:16

Existing AM

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1 T.* ** 1 D.* ** 1 D.* ** 1 T.* ** 1 T.* **]]] 		Existing	ng AM	Peak Hour	1	 		 	! ! !	
~-1 *		Mo	Montecito			bara study					
	oss as Cycle ************************************	Level Of Ser Cycle Length	1 Of Servi Length %) ********	Service Comprished the Service Comprished the Service Comprished the Service Comprished the Service th	ce Computation Method (Future ************************************	(Future	Report Volume	e Alte	W *	* * * * * * * * * * * * * * * * * * *	,
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Street Name: Approach: Movement:	Ca North B	K P K	× ⊢	к Ді	Bound	i ii	East Bo	Gutlerrez Bound - R L	k i	* 5 * 1	Bound R
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sced Vol:	64	0	0	127	51	0	0		44	rU.	20
PCE Adj: 1. MLF Adj: 1.	00 1 00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
lume:	64	0	0	127	51	0	0		44	557	20
Saturation Flow	Module:	1600		1 0031	1 00	1600			1 6	1 6	
ment:	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes: 1. Final Sat.: 16	1.00 1.00 1600 1600	0.00	0.00	0.71	0.29 459	0.00	0.00	0.00	0.14	1.80	0.06
Capacity Analysis	Module 0.04	0.00	00.00	0.11	0.11	00.00	00.00	00.00	0.03	0.19	0.19

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Existing PM		٤	Wed Feb 2	20, 2008	15	:46:35		Page	3-1
		24	Existing City of S Montecito (ות ו	PM Peak Hour Santa Barbara Condos Restudy	ਸ਼ੁਰੂ ਯੂਨ			1 1 1 1 1
ICO 1	[Los	Leve Cycle	1 Of Service Computation Length %) Method (Future	ce Comp	Computation thod (Futur	on Report	* 1	Alternative)	* * * *
Intersection #1	Ha]		St and Garden St	ST ***	*****	************	****	*****	****
Cycle (sec): Loss Time (sec Optimal Cycle:): (sec): cle:		0.0=	Sec) Av	Critical Average I Level Of	l Vol./Cap.(X) Delay (sec/ve E Service:	Cap.(X): (sec/veh) ce:	× 	0.654 xxxxxx B
Street Name:	****	********** Garden	****** en St	*	***	************	******** Haley	* * * * * * * * * * * * *	****
Approach: Movement:	North	8	South	h Bound T	ມ ສີ	٦, ۱۲	omi	West	3 1
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ict Vo				0 1					
Reduced Vol: PCE Adj:	-	П	H	456 .00 1	1	7		.00	H
MLF Adj: FinalVolume:	1.00 1.	.00 1.00 309 231	1.00 1	.00 1	00.	00 1.00 19 593	281	1.00 1.00	1.00
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Capacity Ana Vol/Sat: Crit Moves:	Analysis Mo 0.00 0. s: **	Module: 0.34 0.34 ****	0.03 0.16 0.00	.16	_ 0 *	.01 0.4	0.18	0.00 0.00	0.00 0.00

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

		*	*	*	*			
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oject	PM PEA VOLUME	309 508 0	885 46	000	101 487 316			0.600 0.700 0.800 0.900 1.000 UP
ales" Pr							3	
535 E. Montecito Street "Los Portales" Project Existing PM Conditions Gulierrez Street at Garden Street						ŧ		0.100 0.601 0.701 0.801 0.901
535 E. Montectro Street "Los Pon Existing PM Conditions Gutjerrez Street af Garden Street 02/12/08	CAPACITY	3200 1600	3200		1600 1600 1600	N/S Movements E/W Movements Rt. Turn Component Yellow Clearance		
NO.	LANES	0 - 12	000	000	T- T- T-	S P Y VITEIZATI	CE(1.0S)	
PROJECT ANALYSIS CONDITION INTERSECTION: DATE OF ANALYSIS:	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBL EBLT EBTR	WBL WBT WBR	N/S Moven E/W Mover Rt. Turn Cc Yellow Cler	LEVEL OF SERVICE (LOS)	

										1	
		E SE	Existing City of Montecito		PM Peak Hour Santa Barbara Condos Restudy	Hour chara	I I I I				
ICU 1 ***********************************	(Loss as ****** #3 US-1	s as Cycle Leng: ************************************	1 Of Servi Length %) ********	ı 0.+ ⊱ı	: 0.175 *	utation Report (Future Volume *******************	Report Volume		Alternative)	* * * •	! * ! * ! *
**************************************	* * * *	* 004	**************************************	**** Sec)	**************************************	ᆍᆏᄖᇄ	* `	<pre>cap.(X): (sec/veh) ce:</pre>	* * * *	* 0 0	* * * X C X D
**************************************	****** North L - T	******** Garden Bound - R	* 02 🗇	******* t South Bo	*** nd R	* H	******* US-1 East Boun	* * e g K	******* NB Ramps Wes	* * * T B0	****** Bound
Control: Rights: Min. Green: Lanes:	Prot+Permit Include 0 0 0	rmit ude 0	. 0	Permitted Include 0	tted 10 0 1		Permitted Include 0	ted de 0	0 0	ermit Inclu	ted de 0
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Added Vol: PasserByVol:			00	00	00	00	00	00	00	00	00
Initial Fut: User Adj:	7	Τ.	1.00	610	644	1.00	1.00	1.00			210 0.51
PHF Adj: PHF Volume:	1.00 1.00 405 580	1.0	1.00	610	1.00 489	1.00	1.00 0.1	Φ.		1.00	$\frac{1.00}{107}$
Reduced Vol:			00		489	00		0 0	115	00	107
PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 1.00 1.00 405 580	1.00	1.00	$\frac{1.00}{1.00}$	1.00 1.00 489	1.9 0.90	1.00	1,00	1.00	1.00	1.00
្រឹត្ត			1		<u></u>		1				
Sat/Lane:	1600 1600	1600	1600		1600	1600		1600	009	1600	1500
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Final Sat.:	1600 3200		0	3200	1600	0		0	009		1543
apacity ol/Sat:	Analysis Module	le: 0.00	0,00	0.19	0.31	0.00	0.00	0.00	0.07	00.00	0.07
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Existing PM		Wed	Feb	20, 2	2008 15	:46:35				Page	5-1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: : : : : :	W.	Existing City of S Montecito		0 0 0	k Hour Sarbara Restudy	1 1 1	1 1 1 1 1	1 1 1 1	 	
100 1(1 x x x x x x x x x x x x x x x x x x	(Loss as C) ************************************	Level Of Cycle Leng *******	1 Of Service Length %) Me ************************************		. 5 * N	i n	Report P Volume	1 0 *	Alternative	7e)	* * *
* 00	* * * * * * * * * * * * * * * * * * * *	* 000	* O .	* * 0	<pre>********* Critical) Average Level Of</pre>	******** al Vol./ fe Delay Of Servi	******** Vol./Cap. elay (sec/ Service:	.(X): c/veh	* * *	0.5 xxxx	**** 69 XX A
**************************************	North BC		SCU	* 6	Bound	**************************************	****** US East Bo	***** -101 und - R	******* SB Ramps Wes	* 1	Bound R
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0	ted 1 de 0 1 0	2 0 1	Protected Include 0 0	de 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 T	Permitted Include 0 0 1:0	ted de 0 0 1 0 0 1 0		Permitted Include 0	de de 0
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2000 HCM 2000 HCM	Were the control of t	evel (Santa Barbara Condos Restud	Restudy					
* - *	/veh) ***** th Bou	*** 82 **	Level Of Service Computation Report Unsignalized Method (Future Volume Alternative	thod ****	Computation d (Future Vo.	tion l	Report	Computation Report (Future Volume Alternative)	*	1 *	* *
H	th Bor T Op Sic	,	5.8 Worst Case		Worst	Case	Level	t Case Level Of Servi	Of Service: C	20.	k — †
	op Sig	Olive Bound	re St South L - '	th Bo	Bound	H E	East Bo	Gutierrez Bound	rez St West	Bound	ğ
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Adj: 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.		1.00
Initial Bse: 84	27	00	00	67	172	00	00	00		689	42
	0 9	0	0	0	0	0	00	0	00	00	0
2 C	7.7) O	1 67	7/7		9 9	9 6	177		42
1.00 1.00	. 0	1.00	1.00	1.00	90	1.00		1.00	00.		1.00
PHF Volume: 84	27	0 0	00	67	172	00	0 0	00	175	689	42
	27			67	172	-	0	0	12 6	89	42
Modul	1	1	1	1	-	<u>;</u>			1		!
Critical Gp: 7.1 FollowUpTim: 3.5	4.0.4	XXXXX	XXXXX	4.0	3.3	XXXXX XXXXX XXXXX XXXXX	XXXX	XXXXXX	4.1 2.2 xx	XXXX	XXXXX
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le/Cap: 0.24		XXXX	XXX	0.19	0.25	X X	XXX	X			X
ervice	Module				_			_			
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CONTROL DELIXXXXX > LOS by Move: *	*	*	*	×	*	*	XX *	*	. 4 X	₽ XX *	X *
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d Los:	**	***	****	*	٠ ر	***	× ×	*	X 4	я Х Х	Ž *
	20.0			17.0	,	. 8	XXXXX		XXXXXX	. X	
ApproachLOS:	ט			υ			*			*	

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		ŭ	City of Montecito		Santa Barbara Condos Restud	arbara Restudy					
IDU 1	Level Of Service Level Of Service (Loss as Cycle Length %) M ************************************	Level (Cycle Le *******	Of Servi Length %)	Service C th %) Met ********	ce Computation Report Method (Future Volume Alternative	tation Future	Report Volume	* * A A A A A A A A A A A A A A A A A A	Alternative **********	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *
Cycle (sec): Loss Time (sec Optimal Cycle:		100 (Y+R=0.0 sec) Avera 28 Level	3 0 0 0 8	Sec.)	Critical Average Level Of	al Vol., re Delay Of Servi	Vol./Cap.(X) Pelay (sec/ve Service:	cal Vol./Cap.(X): 0.389 ge Delay (sec/veh): xxxxxx Of Service: A	() () ()	• •	68 X 4
Street Name: Approach: Movement:	North L -	Calle Cesar Bound T - R	sar Cha Sou L	Chavez South Bound	und - R	ا ب	East Bo - T	Gutierrez Bound - R L	rez St	St West Bo	Bound - R
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 1 0	tted tde 0 0	0 0	Permitted Include 0	ted de 1 0	0 0	Permitted Include 0 0	ted de 0	- 0	Permitted Include 0	ted
Volume Module Base Vol: Growth Adi:	74 96 1.00 1.00	1.00	1.00	84	85	100	0 1	00.1	1 28	438	37
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. 쉱.	,	00	00	00	0 0	0	00	00	0		0
Initial Fut: User Adj:	1.00 1.00	1.00	0	84 1.00	0.67	1.00	1.00	1,00	1.00	438	37
PHF Adj: PHF Volume:	1.00 1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.0	
. :>		00	00		0 (000	00	000	0	1	0
	\vdash	1.00	1.00		1.00	1.00	1.00		1.00	-+	1.00
MLF Adj: FinalVolume:	1.00 1.00 74 96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	30
[24 	W Mod 600 1	1600	1600	1600	1600	1600	1600	1600	1600	1	1600
Adjustment: Lanes: Final Sat.:	1.00 1.00 1.00 1.00 1600 1600	0.00	0.00	1.00 0.60 954	1.00 0.40 646	0.00	0.00	0.00	1.00 0.11 181	$\frac{1.00}{1.77}$ $\frac{2826}{1}$	1.00 0.12 193
	ysis Modul	e: 0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.02	0.15	0.15

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Wed Feb 20, 2008 15:46:35

Existing PM

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	Change in	+ 0.000 V/C	+ 0.000 v/c	+ 0.000 V/C	* 0.000 D/V	+ 0.000 V/C
	Future Del/ V/		A xxxxx 0.558 + 0.000 V/C	A xxxxx 0.450 + 0.000 V/C	C 15.7 0.000 + 0.000 D/V	A xxxxx 0.450 + 0.000 V/C
Impact Analysis Report Level Of Service	Base Del/ V/	B xxxxx 0.676	A xxxxx 0.558	A xxxxx 0.450	c 15.7 0.000	A xxxxx 0.450
Impact A Level	Intersection	# 1 Haley St and Garden St	# 3 US-101 NB Ramps and Garden St	# 4 US-101 SB Ramps and Garden St	# 5 Gutierrez St and Olive St	# 6 Gutierrez St and Calle Cesar C A xxxxx 0.450

Existing With Project AM Wed Feb 20, 2008 15:46:46

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Intersection #1	Haley	St and	Garden	\$\$¢	* * * *	* * *	*	*****	ey St and Garden St ************************************	* * * *	*
Cycle (sec): Loss Time (sec) Optimal Cycle:		100 10 (Y+R= 47	(Y+R=0.0 s	ec)	Critical Average Level Of	el Vol.	Vol./Cap.(X) Selay (sec/ve Service:	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service:	×	0.676 XXXXXX B	4
Street Name: Approach: Movement:	North -	Bou	South	th T	Bound - R	i i	East Bo	Haley Bound - R	St West L - '	Bound	70 ~
Control: Rights:	Perm	Permitted Include	_ 64 	Permitted Include	ted ted	 		ted de	Peru Feru		ซ
Min. Green: Lanes:	000	0 0	00		00	0	1 10	0 1 0	000	000	00
Volume Module			1	1	1	-				1	
Base Vol:	0		33	325	0	20	392	168		0	0
Growth Adj: Initial Bae:	1.00 1.00	0 1.00	1,00	325	1.00	1.00	1.00 392	1.00	1.00 1.0	 00 °	9.0
Added Vol:	. 0		0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0
Initial Fut:	0 8		8 6	325	0 6	50	392	168	r		0 0
USer Adj: PHF Adj:	1.00 1.00		1.00	1.00	00.1	1.00	00.1	1.00	1.00	1 00	1.00
PHF Volume:	0 31	96 361		325	0	20	392	155	i		
			0	0	0	0	0	0	Q	0	0
Reduced Vol:	0 316			325	0	20		155			0
			•	1.00	1.00	1.00	_	1.00	ή,	Η,	8
MLF Adj: Finalvolume:	1.00 1.00	0 1.00	38	325	1.00	1.00	392	155	1.00 1.0	⊤ 00	1.00
i	1		-		-	1					i
Sat /Lane:	1600 1600	1600	1600	1600	1600	1600	1600	1600	1600 1600		1600
Adjustment:	00.			1.00	1.00	1.00		1.00			1.00
Lanes:				1.79	0.00	0.10	Н	1.00	0		00.
Final Sat.:	0 74	7 853	335	2865	0	155	L)	1600	0	о С	0
Capacity Anal	ysis	 e									
Vol /Sat:	0.00 0.42	2 0.42	0	-	2	<u></u>	~	C		C	0

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

PROJECT. ANALYSIS CONDITION INTERSECTION: DATE OF ANALYSIS.	OITION:	535 E. Montec Existing With Gutlerrez Stre 02/12/08	535 E. Montecito Street "Los Portales" Project Existing With Project AM Conditions Gutiorez Street at Garden Street 02/12/08	s" Project		en de la compansión de
MOVEMENT	LANES	CAPACITY		VOL	AM PEAK HOUR VOLUME V/C	HOUR V/C
NBL NBT NBR	1 0	3200 1600			288 577 0	0.090 0.361 * 0.000
SBL SBT SBTR	0 70	3200			0 387 15	0.000 * 0.126 0.000
EBL EBLT EBTR	000				000	0.000 0.000 0.000
WBL WBT WBR		1600 1600 1600			133 585 270	0.083 0.366 * 0.169
		N/S Movements E/W Movements Rt. Turn Component Yellow Clearance	ts nts nonent nce			0.361 0.366 0.000 0.100
CAPACIT OF SERV	TOTAL CAPACITY UTILIZATION (ICU) LEVEL OF SERVICE (LOS)	TION (ICU)				.0.826 .D
				<u>100</u>		SOT
			0.100	- 0.600	88	ďΩ
			0.701	0.800 -	88	υ <u></u>
			1.001	- 1.000 - UP	8,	шш

Existing With Project AM Wed Feb 20, 2008 15:46:46

ICU 1(Loss as **********************************	(Loss ******	as Cy *****	Level Of Cycle Leng ************************************	O + +	Service C th %) Met ********	ce Computation Method (Future ************************************	Level Of Service Computation Report Cycle Length %) Method (Future Volume ************************************	Report Volume		Alternative)	* * · · · · · · · · · · · · · · · · · ·	* *
**************************************	* ()	* -		* • •	* (U) -	Critical Average Level Of	0 sec) Average Delay (sec/ve) Level Of Service:	Vol./Cap.(X) elay (sec/ve Service:	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service:	*	0.558 XXXXXX A	8 X ₹
**************************************	North	× ⊟	Garde und - R	St	outh Bo	Bound I - R	1 H	us ust Bo	US-101 NB Bound		mps West Bor	Bound
Control: Rights: Min. Green: Lanes:	Pro 0	t+Per Inclu	de de 0		Permitted Include 0	ted 1 0 0 1	0 0	Permitted Include 0	ted de 0	0 0 1	ermit Inclu	ted de 0
Volume Modul Base Vol:	- 60	969	0		412	543	-	0	!	119	. 0	218
Growth Adj: Initial Bse:	1.00	1.00	1.00 0	1.00	412	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Added Vol:	00	00	00	00	00	00		00	00	00	00	00
rasserbyvor: Initial Fut:	198	969	00	0	412	54	00	00	0	119	0	218
		1.00	1.00	1.00	1.00	0.7	-4	0.	1.00	1.00	1.00	0.56
PHF Adj: PHF Volume:	1.00	1.00	1.00 0	1.00	1.00 412	1.00	D. 1	1.00	1.00	119	7.00 0	1.00
oct v		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol: PCF Adi	198	969	0 0	0 0	412	413		0 0	1.00	11.9	00.	122
MLF Adj: FinalVolume:	1.00	1.00	00.1	1.00				0	0	1.00	1.00	1.00
i		dule:	1600	1600		1600	1600	1600	1600		1600	1600
Adjustment: Lanes: Final Sat.:	1.00 1.00 1600	1.00 2.00 3200	0.00	1.00	1.00 2.00 3200	1.00 1.00 1600	0.00	1.00 0.00	0.00	1.00 0.99 1580	1.00 0.01 20	1.00 1.00 1600
Capacity Ana.	lysis	Modul										1 :

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Existing With Project AM

Page 6-1

	Level	Level Of Service Computation Report	 e Computa	tion Repor	8 ct 10 10 10 10 10 10 10 1			
**************************************	**************************************	amps and Ga	**************************************	5 * * * * * * * * * * * * * * * * * * *	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	* * * * * * * * * * * * * * * * * * *	* * *	1 Theresection
Cycle (sec): Loss Time (sec): Optimal Cycle:): 10 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx 31 Lovel Of Service: A	00 10 (Y+R=0.0 sec) 31 ***********	Critic Critic Averag Level	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: ************************************	p.(X): ec/veh):	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	* * * * * * * * * * * * * * * * * * *	Average Delay ************************************
Street Name: Approach: Movement:	Gar North Bound L - T - R	Garden St ind South R L - T	t South Bound - T - R	US-10 East Bound L - T - 1	US-101 SB Ramps Bound Wes	Ramps West Bound L - T -	und - R	Movement:
Control: Rights:	Permitted Include	- Prote Inc		Permitted Include	tted ude	Permitted Include	 ted de	Kights: Lanes:
Min. Green: Lanes:	0 0 0 0 0 0	2 0 1	0 0 0	0 0 1	0 1 0	0000	000	Volume Module: Base Vol:
Volume Module:	; ; ; ; ; ; ; ; ; ; ; ;			 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Growth Adj: J Initial Bse:
Base Vol:	0 318 5	22 22 278 278 00 1 00 1 00 1	0 - 00	525 0	350	00 00	0 0	Added Vol:
Initial Bse:	0 318 5.			525 0	350	0	0	Initial Fut:
Added Vol:	00	0 0	00	00	0 0	00	00	User Adj:]
۲:	318	227		525 0	350	0		PHF Volume:
	1.00	1.00	00 1.00	1,00 1.00	•	1.00 1.00	1.00	Reduct Vol:
PHF Volume:	1.00 1.00 1.00 0 318 49	0 1.00 1.00 9 227 278		1.00 1.00 525 0	235	0 7 00 7	00.1	::nalvolume:
Reduct Vol:		O	0 0	0	0	0	0	Critical Gap 1
Reduced Vol:	0 318 49	227 00 L		1 00 1 00	235	0 0	0 0 0	Critical Gp:
	1.00	1.001	00 1.00	1.00 1.00		1.00 1.00	1.00	
FinalVolume:	0 318 4	9 227 278	78 0	525 0	235	0 0	0	Capacity Modul
Saturation Flow Module:	ow Module:	 n 1600 1600	. 0091 06	1600 1600	1600	1600 1600	1800	Potent Cap.: Move Can :
 		1.00		1.00 1.00		1.00 1.00	1.00	Volume/Cap: (
Sat.:	2774	3200		3200 0		0		Level Of Servi
Capacity Analysis Module	ysis Module:	_	ì		1		() () () () () () () () () () () () ()	Control Del:xx
0) 0)	****	/T.0 /0.0	00.0	00.00	0.10	00.00	00.0	Movement:
F**********	古子子子子子女子女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女	******	*****	*****	*****	******	***	Shared Cap.:

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002	0*	vel gnal	Of Serviced Me	ervice C Method	Computati (Future	1	Report ume Alte	I ≒i∗		*
sect.	. Gut	±,*	*		* *	*	*	*	* * * * * * * * * * * * * * * * * * * *	* * * * *
Average Delay	y (sec/veh):	******	T. C.	* * * * *	Worst	Case 1	Level	Level Of Service:	J * *	15.7}
	O North Bound L - T -	Olive ound - R	S	t South Bound - T -	und - R	E E	East Bo	Gutierrez Bound [- R L	St West	Bound - R
Control: Rights: Lanes:	Stop Sign Include 0 1 0 0	Sign clude	28	Stop Sign Include	gn I 0	o o	Uncontroll Include	lled Ide	Uncontroll Include	olled ude
Volume Modul										-
Base Vol:	33 24	000	0 5	98	116	0 0	0 5	0 5	14 555	50
Initial Bse:	i	1	•	86	116	•	90	•	4 44	-
Added Vol:	0	0	0	0	0	0	0	0		
FasserByVol:	33 0		00	0 0	0 4	00	0 0	0 0	0 4	
Harradi.	00 1	-		000	1.00		<u></u>			_
PHF Adj:		1.0	\circ	1.00	1.00	1.00	1.00	1.00	100.	44
PHF Volume:	33 24		0	96	116	0	0	0		
Reduct Vol: FinalVolume:	33 24	00	00	ဝစ္ထ	116	00	00	00	0 0 14 555	50 O
	i	-	1		Ī		1		1	1
Critical Gap Critical Gp:	Module 7.1		xxxxx	6.9	6.2	XXXXX	××××	xxxxx	4.1 xxxx	
FoltowUpTim:	4	XXXXX	××××	4.0	m i	XXXXX	XXXX	XXXXX		XXXXX
Capacity Modul Cnflict Vol:	36 I 35 I 1	XXXX	XXX	593	288	XXX	×××	XXXX	xxxx 0	XXXX
Potent Cap.:		XXXXX	XXXX	421	756	XXXX	XXXX	XXXXX	800 xxxx	XXXXX
Move Cap.: Volume/Cap:	414 409 0.08 0.06	XXXXX	XXXX	415	756	XXXX	XXXX	xxxxx xxxx	900 xxxx 0.02 xxxx	XXXXX
Level Of Ser	Service Module	_ 	_			<u> </u>				
Stho	XXXX XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	0.0 xxxx	XXXXX
rol Del	xxxx xxxxx:	XXX	XXXXX	xxxx	XXXXX	XXXXX	XXXX	XXXXX	l xx	XXX
LOS by Move: Movement:	* ET + ET	* £	* ==	* #	* E	* =	* 1.7	* E-	A . T.T.R.	* [
Shared Cap.:	×	×	XXXX	XXXX	549	XXXX	XXXX	XXXXX	~	×
SharedQueue:			XXXXX	XXXX	1.8	XXXXX	XXXX	XXXXX	0.0 xxxx	
Shrd ConDel:	15.1 xxxx	XXXXX	××××	××××	15.7	XXXXX	×××	××××	9.1 xxxx	XXXXX
ApproachDel:	<u>ا</u>	,	•	15.7	ر		×××××		× × ×	
ApproachLOS:	D A			0		3	*		*	
*	*	****	*****	****	***	****	****	*****	*******	****
Note: Queue	reported is the number of	s the r	number *****	*	cars per	Jane.	* * * *	***	Cars per lane.	****

Intersection #6 Gutierrez St and Calle Cesar Chavez Include 0 0 0 1 0 1 0 23 1.00 23 23 0.87 1.00 20 1.00 1.00 20 20 1600 1.00 0.06 103 Permitted 1600 1600 1.00 1.00 0.14 1.80 227 2870 0 1600 1600 1600 1600 1.00 1.00 1.00 1.00 0.28 0.00 0.00 0.00 454 0 0 0 0 0 0 0 0 Permitted Trolude Include 0 72 0.71 1.00 0 0 0 0 Permitted Include 1.00 1.29 1.00 1.00 0 0 0 0 1.00 1.00 1.00 1.29 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1600 1600 1.00 1.00 0.00 0.72 0 1146 Sat/Lane: 1600 1600 1600 Adjustment: 1.00 1.00 1.00 Lanes: 1.00 1.00 0.00 Final Sat.: 1600 1600 0 1 0 1 0 0 0 Permitted Includ Saturation Flow Module: Reduct Vol: 70
Reduced Vol: 70
PCE Adj: 1.00 1
MIF Adj: 1.00 1
FinalVolume: 70 Lanes:

Volume Module:

Base Vol: 70

Growth Add; 1.00 1

Initial Bse: 70

Added Vol: 0

FasserByVol: 0

Initial Fut: 70

Initial Fut: 70

User Adj: 1.00 1

PHF Adj: 1.00 1

Reduct Vol: 0

Reduct Vol: 0

Reduct Vol: 0

Reduct Adj: 1.00 1

Reduct Adj: 1.00 1

Reduct Adj: 1.00 1

Reduct Adj: 1.00 1

Reduct Adj: 1.00 1 Rights: Min. Green: Lanes: Control:

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20,
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Wed
PM
Project
With
Existing

Page 2-1		Change in	+ 0.000 V/C	+ 0.000 V/C	+ 0.000 V/C	+ 0.000 b/v	+ 0.000 V/C	
3	 	Future Del/ V/	B xxxxx 0.667 + 0.000 V/C	C xxxxx 0.732 + 0.000 V/C	A xxxxx 0.571 + 0.000 V/C	C 20.1 0.000 + 0.000 D/V	A XXXXX 0.396 + 0.000 V/C	
Wed Feb 20, 2008 15:46:53	Impact Analysis Report Level Of Service	Base Del/ V/	B xxxxx 0.667	C xxxxx 0.732	A xxxxx 0.571	C 20.1 0.000	A xxxxx 0.396	
- 1	Impact F Level		Garden St	3 US-101 NB Ramps and Garden St	4 US-101 SB Ramps and Garden St	and Olive St	6 Gutierrez St and Calle Cesar C A xxxxx 0.396	
Existing With Project PM		Intersection	# 1 Haley St and Garden	# 3 US-101 NB Ra	# 4 US-101 SB Ra	# 5 Gutierrez St and Olive St	# 6 Gutierrez St	

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Page 3-1

ICO	0 * -	(r) + (Cycle Length	ength ****	th %) Met	Cycle Length 8) Method (Future Volume	(Future	Volume		Alternative) ********	/e) +***	* * *
***********	- T tl T T #		* * * * * * * *	and Garden St	*	*****	*************	****	****	* * * *	*****	* * * * *
s (sec		100				Critical		Vol./Cap	Cap. (X):		0.667	19
Cptimal Cycle:	(sec): cle: ****	- 4 ÷	ۇ ئوي ∟	0.0 + + +	ec)	Average Delay (sec/veh): xxxxxx Level Of Service: B	of Servi	elay (se Service:	(sec/veh) ce:		XXXXX	×m
Street Name:			. 0	en St					Haley	y St	k K K	k k
Approach: Movement:	North		Bound - R	So	South Bo	Bound - R	ы Щ	East Bo - T	Bound - R	H	st	Bound - R
Control:	i d	Permitted	ted	-	Permitted	ted	-	Permitted	ted	-	Permitted	ted
		Include			Include			Include			Include	
Min. Green: Lanes:	000	0	00	0	1 0	000	0 0	1 0	0 -	0 0	٥ ٥	°c
	;			-	1		-					- 1
Rase Vol:	- -	01.0	36	77	7 5 5	c	0	0	000	c	c	
Growth Ad1:	1.00 1	1.00	1.00	00 - [_	1.00	00 L	_	000	9 6	5	,
Initial Bse:	0	310	268		ਰ	0	19	595	330	0	0	20
Added Vol:	0	0	0	0	0	0	0		0	0	0	0
	0	0	0	0	0	0	0		0	0	0	0
Initial Fut:	0	310	268	44			19	595	330	0	0	0
User Adj:	1.00	1.00	0.92	1.00		H	1.00	1.00	0.85	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	_	1.0	1.00	1.00	1.00	1.00	1.00	1.00
PHF VOlume:	-	330	247	44	455	0	19	595	281	0	0	0
Reduct Vol:	0 0	9.0	10	0	0 1	0	0 ;		0 .0	0	0 (0 (
Deduced vol:	5 6	7 0	7.44	7 0	400	2 6	J 6	•	787	O 9		٥,
		00.	3 6	90.4		1.00	3 6	٦,	7.00	1.00	00.1	1.00
		310	247	44	4	0		595	281	0	0	
4	Flow Module	dule:		! ! !					!			1
Sat/Lane:	009	1600	1600	1600		1600	1600	~	1600	1600	1600	1600
Adjustment:	00.	1.00	1.00	1.00	_	1.00	1.00	, -1	1.00	1.00	1.00	1.00
••		0.56	0.44	0.18		0.00	90.0	1.94	1.00	0.00	00.0	00.0
Final Sat.:	0	891	709	282	~	。 -	66	3101	1600	0 -	0	o
Capacity Analy	/818	Module					 	! ! !				
Vol/Sat:		0.35	0.35	0.03	0.16	0.00	0.03	0.19	0.18	0.00	00.0	0.00

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative) Intersection #3 US-101 NB Ramps and Garden St

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Wed Feb 20, 2008 15:46:53

Σ

Existing With Project

Cycle (sec): 100 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx Optimal Cycle: 54 Level Of Service: CC

Garden St

L - T - R

Prot+Permit Include

North Bound

Street Name: Approach: Movement:

| US-101 NB Ramps | South Bound | East Bound | West Bound | South Bound | L - T - R | L - T - R | L - T - R | L - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T - R | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T | R - T |

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...

Rights: Min. Green: Lanes: Control:

Permitted Include 0

Permitted Include 211 0.51 1.00 108

115 1.00 1.00

1.000

1.000

1.00

Volume Module:
Base Vol:
Base Vol:
Intital Bse: 405 586
Added Vol:
PasserByVol: 0 0
Intital Ene: 405 586
User Adj: 1.00 1.00 1
PHF Adj: 1.00 1.00 1
PHF Adj: 1.00 1.00 1
PHF Adj: 405 586
Reduct Volume: 405 586
FCE Add; 1.00 1.00 1
Reduced Vol: 405 586
FCE Adj: 1.00 1.00 1
RinalVolume: 405 586

647 0.76 1.00 492 0 492 1.00 1.00

1.00

108 1.00 1.00

115 0 115 1.00 1.00

1600 1600 1.00 1.00 1.00 0.03 1600 53

1600 1.00 0.00

1600 1.00 0.00

1600 1.00 0.00

1600 1.00 1.00 1600

1600 1600 1.00 1.00 0.00 2.00 0 3200

1600 1.00 0.00

Saturation Flow Module: Sat/Lane: 1600 1600 1 Adjustment: 1.00 1.00 1 Lanes: 1.00 2.00 0 Final Sat.: 1600 3200

0.00

0.07

Capacity Analysis Module:
0.25 0.18 0.00 0.00 0.19 0.31 0.00 0.00 0.00 Crit Moves: ***

535 E. Montéctio Stréet "Los Portales" Project Existing With Project PM Conditions Guifairez Stréet at Garden Street	PM PEAK HOUR VOLUME VIC	309 0.097 * 515 0.322 0 0.000	0.000 885 0.291 * 46 0.000	* 000.0 0 000.0 0 000.0 0	101 0,063 491 0,307 * 317 0,198	0.388 0.307 0.000 0.100	ICU LOS	0.100 - 0.600 A 0.601 - 0.700 B 0.701 - 0.800 C 0.801 - 0.900 D
535 E. Montecito Street "Los Pon Existing With Project PM Condith Gufferrez Street at Garden Street 02/12/08	CAPACITY	3200 1600	3200		1600 1600 1600	N/S Movements E/W Movements Rt. Turn Component Yellow Clearance		
DITION:	LANES	0 + 0	0 7 0	000	~ ~ ~	N UTILIZATI	221	
PROJECT ANALYSIS CONDITION INTERSECTION DATE OF ANALYSIS:	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBL EBLT EBTR	WBL WBT WBR	N/S Moven E/W Mover E/W Mover Rt. Turn Co Yellow Clex TOTAL CAPACITY UTILIZATION (ICU)		

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Existing With Project PM Wed Feb 20, 2008 15:46:53

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Existing With Project PM Wed Feb 20, 2008 15:46:53

	* 4	5 65 CY	Cycle Lengi ************************************	Length & ************************************	*) Med ****** nd Gard	Method (Future Volume ************************************	(Future *******	Volume	*****	rnatıv *****	*	* * *
Cycle (sec): Loss Time (soptimal Cycle	* O		*	(Y+R=0.0 E	sec)	Critical Average Level Of	al Vol./	Vol./Cap.(X) lelay (sec/ve Service:	Cap.(X): (sec/veh) ce:	*	* 5 X + 5 X + 5 X X + 5 X X + 5 X X X + 5 X X X X	* :
Street Name: Approach: Movement:	* 1	**************************************	Garden St Garden St Ound S - R L	n St Sou	× μü	ound East Bound - R L - T - R	* * * 1	US US UST BO	×	SB Ramps West	* Ö	* * * * * * * * * * * * * * * * * * *
Control: Rights:		Permitted Include	ted	. 6. 	Protected Include	ed	#4 -	Permitted Include	ted de	Per	Permitted Include	
Min. Green: Sanes:	00	0 1	1 0	2 0	0 1 0	0 0	00		0 1 0	000	.00	00
	<u> </u> ;			-					1			
Base Vol:		900	87	453	328	0	385	0	278	0	0	0
Growth Adj:	1.00	m	1.00	1.00	\vdash	1.00	1.00	1.00	1.00	1.00 1.	00	1.00
Added Vol.	0 0		è	n C	6 C	o c	000	> 0	0 0	o c	o c	o c
RasserBvVol:	0	0	0	0	0	0	0	0	0	· c	0	0
nitial Fut:	0		87	453	328	0	385	0	278	0	0	0
Jser Adj:	1.00	н,	0.79	1.00		1.00	1.00	1.00	0.40		00.	1.00
PHF Adj:	1.00	_	1,00	1.00	-	1.00	1.00	1.00	1,00	٦	00.	1.00
	00	009	69	453	328	0 (385	0 0	111	0	0	0
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Reduced Vol:	o ;		ο (ο (378		385		TIT		٥ ;	9 !
FCE AGJ:	1.00	٠,	DO.1	1.00 1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
inalvolume:	0	600	69	453	328	0 0	385	1.00	111	0 7 00 7	30	00.1
Saturation E	Flow Module	odule:							0			1 0
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anes:	00.0		20.0	3 T	4 -	00.0	20.00	00.0	00.1		200	00.0
Final Sat.:	0		329	3200			3200		1600		30	30
Capacity Anal	. >-	Σ	φ.	1	,		 		!!!			
707/Sat:	0	0.21	C							000	0	2

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Intersection		***	********************	****	*****	***	*******	****	*****	*****	*****	****
**************************************	tion #5 Gutierrez St and Olive ************************************	ier: **** /veh)	errez St ********	and 0	Olive 8	St ****** Worst	* 00 * 00 * 00	* >	******	******* Service:	***** C[20	* ~
Street Name: Approach: Movement:	Nort	North Bound	* ä.	* N . H	t South Bo	Bound - R	→ Ei + ii + ii + ii	***** East B	**************************************	r****	***** St West Bo	Bound - R
Control; Rights: Lanes:	Stop Inc	op Sign Include	Sign lude	st	Stop Sign Include	Sign lude 1 0	 	Uncontrolled Include 0 0 0 0	olled ude 0 0	un o	Uncontrolled Include	olled ide
Volume Module Base Vol:	e: 86	28	0	0	73	172	0	0	0	12	672	42
Growth Adj: Initial Rsa:		1.00	1.00	1.00	1.00	1.00	1.0	1.0	1.00	1.00	٦	1.00
	000	000	• • •	000	0.0	0 1	00		0	0		ar a
rasserByVol: Initial Fut	၁ မ ထ	2 0	00	00	0 62			00	00	٥٢	0	0 (
Adj	00.	1.00	0.	1.00	1.00		٦.	Ä	,1	1.00	7	1.00
FHF AGJ; PHF Volume:	1.00.1	28	T 00	?	73	1.00	1.0		1.0	1.00	1.00	1.00
Reduct Vol:	0 (0	0	0	0		0		0	0	0	r
rinalvolume:	o x	28	0	5	13	1/2	o :			12	672	42
Critical Gap Critical Gp:	Σ	6,5	××××	××××	6.5	6.2	XXXXX	×××	×××	4.1	×××	XXXX
FollowUpTim:	3.5	4.0	XXXXX	XXXXX	4.0		×××××	XXXX	XXXXX	2.2	XXXX	xxxxx
Capacity Module	ule:							i ! !	1	<u> </u>		
	397	32		XXXX	717	357	XXXX	XXX		0		XXXXX
Move Cap.:	3 00 7 20 00 7 20 10 7	1) (L 14 (L 2) (L	XXXXX	XXXX	, t , t , t , t	692	×××	XXXX	XXXXX	006		XXXXX
Volume/Cap:		0.08		XXXX	0.21	0.25	XXXX	XXXX	XXXX	0.03	XXXX	XXXX
Level Of Serv	Service Module:	dule		1								!
ž	XXXX X	XXXX	XXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXXX	0.0	xxxx	XXXXX
Del.	×	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	9.1	XXXX	XXXXX
Movement:	· E	1.T.R	ν E- Ω	! ₩ E-	* T.4.	÷ E	* 6	* 1	* E-	⊄ E	* £	* E
Shared Cap.:	~	XXXX	XXXXX	XXXX	XXXX	538		- 23	XXXXX	XXXX	XXXX	
	7.4	XXXX	xxxxx	XXXXX	XXXX	2.4	XXXXX	XXXX	XXXXX	0.0		XXXXX
Shrd ConDel:	20.1 x	×××	××××	××××	×××	17.2	××××	××××	××××	9.1	XXXX	XXXXX
ApproachDel:		20.1		ı	17.2	ر	۶	XXXXX	•	₹ ×	×××××	*
100												

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative) Intersection #6 Gutierrez St and Calle Cesar Chavez 37 0.81 1.00 Include 0 0 0 0 0 0 0 1600 1.00 0.12 194 Permitted 1600 1600 1.00 1.00 0.11 1.77 175 2832 438 1.00 1.00 438 438 1.00 438 1.00 1.00 1.00 11.000.000.1 Include 0 0 0 0 0 0 0 1,000 Permitted Level Of Service Computation Report 1.00 1.00 1.00 1.00 1.00 1.00 0 92 85 92 85 92 85 93 0 0 94 0 0 95 0 0 95 0 0 95 0 0 96 0 97 0 0 0 Permitted Include 0 0 0 Permitted Include 0 0 0 0 1 0 0 0 Volume Module:
Base Vol:
77 96
Initial Bas: 77 96
Added Vol:
7 96
Initial Law: 77 96
Initial Law: 77 96
Initial Ful: 77 96
User Add: 1.00 1.00
PHF Add: 1.00 1.00 Rights: Min. Green: Lanes: Control:

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FUTURE BASE CONDITIONS

Fut	Future Base AM	Wed Feb 2	Wed Feb 20, 2008 15:47:02	2	Page 2-1
		Impact An	Impact Analysis Report Level Of Service		
Int	Intersection		Base Del/ V/	Future Del/ V/	Change in
*	1 Haley St and Garden St	St	C xxxxx 0.761	C xxxxx 0.761	1 0.000 v/c
-#10-	3 US-101 NB Ramps and Garden St	Sarden St	B xxxxx 0.618	B xxxxx 0.618 + 0.000 V/C	+ 0.000 v/c
445	4 US-101 SB Ramps and Garden St	Sarden St	A xxxxx 0.510	A xxxxx 0.510 + 0.000 V/C	4 0.000 V/C
***	5 Gutierrez St and Olive St	ve St	C 15.7 0.000	C 15.7 0.000 + 0.000 D/V	4 0.000 D/V
**	6 Gutierrez St and Calle Cesar C A xxxxx 0.480	le Cesar C	A xxxxx 0.480	A xxxxx 0.480 + 0.000 V/C	+ 0.000 V/C

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Time (sec): Time (sec): 1	0.0 sec)	Critical Vol./ Average Delay Level of Servi Level of Servi Litted East Litted Per Litted Per Litted Delay 10 0 0 1	Critical Vol. (Cap. (X): Average Delay (sec/veh) Level Of Service: A************************************	h): xx	0.763 *** *** *** Bound T - R mitted clude 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
tr Name: North Bo col: South Box Sout	1.00 1	East Bound L T - 1 Permitted Include 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 0 0 0 1 0	S HE HER S	* KI OI O	
ol: Include	1.000		Permitt Includ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	ted 1de 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
me Module: 0 369 Vol: 0 369 In Adj: 1.00 1.00 al Bse: 0 369 In Vol: 0 0 0 arByVol: 0 369 Adj: 1.00 1.00 idj: 0 0 369 it Vol: 0 369	1.00 1	1.00 1	435	<u> </u>	1,00
al Bas: 0 369 1 Vol: 0 369 1 Vol: 0 369 al Fut: 0 369 Adj: 1.00 1.00 Adj: 1.00 1.00 cd vol: 0 369 cd Vol: 0 369	1.00. 4.74 0.00	1.00	1.00	•	1.00
in Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	<	י י	1.00 1.0	0
al Fut: 0 369 Adj: 1.00 1.00 Volume: 0 369 it Vol: 0 369 ed Vol: 0 369 kdj: 1.00 1.00		, c	o c	00	00
Add: 1.00 1.00 add: 1.00 1.00 add: 1	47	0	435	00	0
Control	1.00 1.00	1.00 1	00.0	32 1.00 1.00	1.00
lct Vol: 0 0 0 1	47	0	21 435	0	0
Adj: 1.00 1.00 Adi: 1.00 1.00	οţ	00	0 10		0
3441: 100 1 00	-	1.00 1	.00 1.00 1	00 1.00 1.00	1.00
lVolume: 0 369	1.00 1.00	1.00 1	.00 1.00 1.00 21 435 204	1.00 1	1.00
Flow Module:	1600 1	=	1600	1600	1600
Adjustment: 1.00 1.00 1.00 Lanes: 0.00 0.47 0.53	0.21 1.79	1.00.0	4.00 1.00 1.00 0.09 1.91 1.00	00 1.00	0.00
	2	=	2002	>	

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

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Wed Feb 20, 2008 15:47:02

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Future Base

Tack on a new End of the State of the						Logio "75		
	AM PEAK HOUR LUME VIC	0.101 0.424 * 0.000	0,000 * 0.165 0.000	* 000.0 0.00.0 0.000.0	0.078 0.351 * 0.183	0.424 0.351 0.000 0.100	SOI	∢аООшт
oject	AM PE. VOLUME	323 679 0	0 511 16	000	125 562 292			0.600 0.700 0.800 0.900 1.000
ortales" Pr et							5	0.100 - 0.601 - 0.601 - 0.701 - 0.801 - 1.001 - 1.001
535 E. Montectto Street "Los Portales" Project. Future Base AM Conditions Gutierrez Street at Garden Street 02/12/08						nts nts ponent nce		7 0 0 0 0 0
535.E. Monte Future Base Gutlerrez Str 02/12/08	CAPACITY	3200 1600	3200	1600 1600 1600	1600 1600 1600	N/S Movements E/W Movements Rt. Turn Component Yellow Clearance		
	LANES	0 1 2	0 7 0	*	~ -	Y UTILIZATI		
PROJECT: ANALYSIS CONDITION INTERSECTION DATE OF ANALYSIS:	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBL EBLT EBTR	WBL WBT WBR	NVS Movem EVV Moven EVV EVV Moven Rt. Turn Co Yellow Clea TOTAL CAPACITY UTILIZATION (ICU) LEVEL OF SERVICE (ICS)		

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative) Include 0 0 0 1 0 1 0 254 254 254 0 254 0 254 0.56 1.00 1600 1.00 1.00 1600 Permitted West Bound 1600 1600 1.00 1.00 0.97 0.03 1546 54 1.00 1.00 0.08 0.00 Ramps 133 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 0 0 US-101 NB East Bound 1600 1.00 0.00 1.000 1.00 0 0 0 0 00.0 Permitted Include Level Of Service Computation Report 1.00 1.00 1600 1.00 0.00 0.29 0.00 0.00 0 1,000 1.000 II.000 II.000 II.000 0 609 0.76 1.00 463 1600 1.00 1.00 1600 463 1.00 1.00 463 0 North Bound South Bound
L T R L T R 0 0 0 0 Permitted South Bound Include 519 1.00 1.00 519 0.00 0.16 519 1.00 519 519 1.00 1.00 519 1600 1.00 2.00 3200 1.000 1.00 1,000 Garden St Saturation Flow Module: Sat/Lane: 1600 1600 1600 1 Adjustment: 1.00 1.00 1.00 1 Lanes: 1.00 2.00 0.00 Final Sat.: 1600 3200 00 1.00 1.00 0.00 1.00 Capacity Analysis Module:
Vol/Sat: 0.14 0.25 0.00
Crit Moves: **** Prot+Permit Include 1 0 2 0 Base Vol. 223 802
Growth Adj: 1.00 1.00
Initial Bse: 223 802
Added Vol. 0 0
PasserByVol: 0 0
FasserByVol: 28 802
User Adj: 1.00 1.00
PHF Adj: 1.00 1.00
PHF Adj: 223 802
Reduct Volume: 223 802
PCE Adj: 1.00 1.00
Reduct Adj: 1.00 1.00
Reduct Adj: 1.00 1.00
Reduct Adj: 1.00 1.00
FERANCE Adj: 1.00 1.00
FERANCE Adj: 1.00 1.00
FERANCE Adj: 1.00 1.00
FERANCE Adj: 1.00 1.00 0 0 0 Volume Module: FinalVolume: Street Name: Rights: Min. Green: Lanes: Approach: Movement: Control:

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1111111111		1			1		1 4			1	
ICU 1 ****** ection	oss as C *******	Cycle Length	Serv th % ****	U + U -	e Computation Method (Future ************************************	ure ****	Volume	E# #	* * *	~ * ·	* :
sec): me (s Cycl	* rud - * - * -		* 0 :	* O &	**************************************	Vol Vol Ser	Cap (Se	* . (Q ;	* X - 4	0.510 xxxxxx	10 KX
* ∪⊆	North B	. Ga und	St Sou	8 1	ind R	Easi	, t	101 S nd R	E R.	* ⊥ -	Bound - R
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 0 1 1	tted tted o	2 0 I	Protected Include		Pe D I	rmit nclu 0	ted 1	A 0	ermit Inclu	ted de 0
Volume Module Base Vol:			288	334	0	586	O	398	0	0	0
Growth Adj: Initial Bse:	1.00 1.00	1.00	1.00 1	334	1.00	1.00 1	00.	398	1.00	1.00	1.00
Added Vol:	000	00	00	0¢	00	00	00	00	00	00	00
Initial Fut:		,	288	3		9 6		90	0 0	0 0	0 0
		0.7	1.00.1	88	1.00	1.00.1	1.00	1.00	1.00	1.00	1.00
PHF Volume: Reduct Vol:			288	334	00	586	00	267	00	00	00
Reduced Vol:	0 382	-		334	0 0	586	0 0	267	1.00	1.00	1.00
	3.1.	; ;	.00	334				1.00	00.1	1.00	1.00
Saturation Fl Sat/Lane:	- E 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1600 1		1600		1600	1600	1600	1600	1600
Adjustment:			1.00 1	00.	1.00	1.00 1		1.00	1.00	1.00	1.00
			3200 1	009	20			1600	0		90
Capacity Anal Vol/Sat: Crit Moves:	ysis Modul 0.00 0.14 ****	10: 0:14 *****	0.09 0 .0	.21	00.00	0.18	0.00	0.17	0.00	0.00	0.00

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2000 **********************************	2000 HCM ******** n #5 Gut:	at and at	Level (signali ******* rez St	Devoted of Service Visionalized Method ************************************	service ced Method	d (Futur ****** St	* * ^ 0 I	0 + + + + + + + + + + + + + + + + + + +	* * t0	rnative)	* * *	* *
Average Delay	y (sec	(sec/veh)	**	. 5.0 Worst	**		Case	Level	9.4	*	- ;	1- 1
Street Name: Approach: Movement:	H	North Bound	oliv bund - R	ive St Sou	outh Bound	ound - R	. 1	ast B	Gutierre Bound T - R	N 13	1.9 C	und - R
Control: Rights: Lanes:	st 0 1	d ii	Sign lude 0 0		Stop Sign Include	Sign :lude	0	Uncontrolled Include	olled ude 0 0	o Un	Uncontrolled Include	lled de 1 0
e Modul	- : - :	:		<u> </u>					1			
Base Vol:	7 29	22	0 5	0 6	98 5	118	0 6	0 0	0 0	14	555	20
Initial Bse:	. ~	•		•	•	118	4	i			555	202
Added Vol:	00	0	00	00	0	0	00		0 0	0	0 0	0 0
FasserByvol:	o d	200	0	> C	ο σ	118		00	00) <u>-</u>	ה ה ה	C
-1	1.00	1.00	1.00	1.0	1.00	1.00	Н	1.0	_	1.00		1.00
		1.00	0	٦.	0	1.00	1.0	i	1.0		-	
PHF Volume:	5.0	22	0 (0 (86	118			0	14	555	20
Reduct Vol: FinalVolume:	0 6 7	22	00	00) 86	118	00	00	00	14	525	20
Critical Gap	! ≗ '	ı			1	1	_	1	1	,		! ! !
CallowUpTim:		0 0	× × × × × × × × × × × × × × × × × × ×	××××	0.4	9 6	XXXXX	× × × ×	××××	2.0	X X X X	****
	;			-		- 1	_	- 1	- 1	7	4	٠ i
	ule:						-			-		
Chilict Vol:	355	603	XXXXX	XXXX	263	288			XXXXX	0	××××	xxxxx
	6 C F	9 0	XXXXX	XXXX		756				000		××××
Move cap.: Volume/Cap.	4T5	, כי עיקט	××××	XXXX	0.24	007	XXXX	XXXX	XXXXX	000	×××	××××
				-			_	1			4	4
Level Ol Selv 2Wav95th0:	Service Module	XXXX	XXXXX	XXXX	XXXX	XXXX	××××	XXXX	XXXX	0.0	XXXX	XXXXX
~		XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX		XXXXX	9.1	XXXX	XXXXX
LOS by Move:	*	*	*	*	*	*	*	*	*	Æ	*	*
Movement:		LTR	- RT	H	- LTR	- RT				Ľ		- RT
Shared Cap.:		XXXX	XXXX	XXXX	XXXX	550			XXXXX	XXXX		XXXXX
SharedQueue:		XXX	XXXX	XXXX	XXX	⊣ ы			XXXX	0.0	X	XXXX
Shared LOS:	ο σ π	× *	***	***	× * *	. C	× × ×	× *	***	ນ - ເຄ	× * × *	×× ×× ××
ApproachDel:		15.0			15.7	;		XXXXXX		ς ×	XXXXXX	
7.7												

Page 7-1	lternative)
Future Base AM Wed Feb 20, 2008 15:47:02 Page 7-1	Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
Future Base AM	ICU 1 (Loss as

+ + + + + + + +	* * * * * *	80 X X X	und - R	ted de 0	-	1.00	24	0	24	0.87	21	0	21	1.00	21	1600	1.00	98	0.21
ve >	****	0.480 XXXXXX B B	i is i	Permitted Include 0	1	-	613				1.00 613			1.00		1600		2885	*
Alternative>	* * * *	; ; ;	L Z	0 0	-	1.00	46	0	46	1.00	1.00	0	46	1.00	46	1600	1.00	217	0.03
ne Alte	***	Cap.(X): (sec/veh) ce:	Gutierrez Mund - R L	ted ide 0	-	1.00	00	0	0	1.00	7	0	0	1.00	0	1690	1.00	90	0.00
Report Volume	* * *	Vol./Cap.(X) Delay (sec/ve) Service:	Gut East Bound	Permitted Include 0		1.00	0 0	0	0	1.00	7 0 0	0	0	1.00	0	1600			00.00
fation (Future	Chavez	al Vo	H H	0	<u> </u>	1.00	00	0	0	1.00	0.1	0	0 ;	1.00	0	1600	1.00	90.	00.0
<pre>vice Computation Report %) Method (Future Volume Alternative ************************************</pre>	Cesar Chavez	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: ************************************	ound - R	ted lde 1 0	0	1.00	78	0	78	0.81	7 . 40 10 10 10 10 10 10 10 10 10 10 10 10 10	0	. 63	1.00	63	1600	1.00	505	0.13 0.00 0.00 0.00 0.03 0.21
Service (th %) Met	Calle (*	ρο;	Permitted Include 0		1.00	137	0	137	1.00	137	0	137	1.00	137	1600	1.00	1095	* * * * * *
Of Ser Length	and C	Y+R=0.0	ar Cha	. 0		1.00	00	0	0	1.00	00.7	0	0 6	1.00	0	1600	1.00		0.00 0.13
Level Of Ser Cycle Length	ez St	100 10 (Y+R=0.0 sec) 32 **********	Calle Cesar Bound T + R]	ted de 0	-	1.00	0 0	0	0 (1.00	0.1	0	0 ;	3.5	0	1600	1.00		e: e:
W +	Gutierrez *****	* 100 * * 110 * * 110	Cal North Bc	Permitted Include 0 0 0		1.00	90	0	99	1.00	99	0	900	1.00	99	Module: 0 1600	1.00		Module 0.04
1 (Loss	9 *	(sec): (le:	L NO	- "	e:	1.00	89 0	0	68	00.1	99	Ō	9 9	1.00	89	Flow Mo 1600	1.00	1600	1ysis 0.04 ****
ICO 1	Intersection	Cycle (sec): Loss Time (sec Optimal Cycle:	Street Name: Approach: Movement:	Control: Rights: Min. Green: Lanes:	Volume Modul	Growth Adj:	Initial Bse: Added Vol:		Initial Fut:	User Adj: DHF Adi.	PHF Volume:	Reduct Vol:	Reduced Vol:	FCE Adj: MLF Adj:	FinalVolume:	Saturation F. Sat/Lane:	Adjustment: Lanes:	Final Sat.:	Capacity Anal Vol/Sat: Crit Moves:

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Page 2-1		Future Change Del/ V/ in	C xxxxx 0.748 + 0.000 V/C	D xxxxx 0.844 + 0.000 V/C	B xxxxx 0.661 + 0.000 V/C	C 20.5 0.000 + 0.000 D/V	A xxxxx 0.422 + 0.000 V/C
11	i ! ! ! ! !	E De					
Wed Feb 20, 2008 15:47:11	Impact Analysis Report Level Of Service	Base Del/ V/	C xxxxx 0.748	D xxxxx 0.844	B xxxxx 0.661	C 20.5 0.000	A xxxxx 0.422
	Impact		Garden St	3 US-101 NB Ramps and Garden St	4 US-101 SB Ramps and Garden St	and Olive St	6 Gutierrez St and Calle Cesar C A xxxxx 0.422
		Intersection	1 Haley St and Garden St	3 US-101 NB Ram	4 US-101 SB Ram	5 Gutierrez St and Olive St	6 Gutierrez St
FL I	l L	п	*	#	#	=#t=	#

1.00

1.00 1.00 1.00 1.00 1.00 0

404 0.85 1.00 343

0 639 1.00 1.00

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404 1.00 404

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Rights: Min. Green: Lanes:

1 0

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Permitted Include

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Control:

I - T - I West Bound

East Bound

Garden St

Street Name: Approach: Movement:

Haley St

1600 1.00 0.00

1600 1600 1.00 1.00 0.00 0.00

1600 1.00 1.00

1600 1.00 1.94 3103

1600 1.00 0.06 97

1600 1.00 0.00

1600 1600 1.00 1.00 0.15 1.85 241 2959

1600 1.00 0.41 648

Saturation Flow Module: Sat/Lane: 1600 1600 1 Adjustment: 1.00 1.00 1 Lanes: 0.00 0.59 0 Final Sat.: 0 952

1.00

639 1.00 1.00 639

46 566 1.00 1.00 1.00 1.00 46 566 1.00 1.00 1.00 1.00

291 1.00 291 291 1.00 291 1.00 268 268 268 268 268 268

Volume Module:
Base Vol:
Growth Adj: 1.00 1.00 1
Initial Base: 0 393
Added Vol: 0 0 0
Initial Fut: 0 393
User Adj: 1.00 1.00 0
PHF Adj: 1.00 1.00 0
PHF Volume: 0 393
Reduct Vol: 0 393
PCE Adj: 1.00 1.00 1
Reduced Vol: 0 393
PCE Adj: 1.00 1.00 1
Reduced Vol: 0 393
PCE Adj: 1.00 1.00 1

Wed Feb 20, 2008 15:47:11

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Base

Future

Page 3-1

G

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0.41 0.03 0.19 0.00 0.01 0.21

Capacity Analysis Module: Vol/Sat: 0.00 0.41 0.

00.0

0.21 0.00

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Traffix

INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

						1,000	.81	
	PM PEAK HOUR LUME V/C	0.110 * 0.403 0.000	0.000 0.309 * 0.000	0.000 0.000 0.000	0.069 0.320 * 0.202	0.419 0.320 0.000 0.100	SOT	∢вООш⊩
jne(j	PM PE/ VOLUME	351 645 0	934 56	000	110 512 323			0.600 0.700 0.800 0.900 1.000
Los Portales" Pi nis ni Street							<u>10</u>	0.100 - 0.601 - 0.801 - 0.901 - 1.001
535 E. Montecito Street "Los Portales", Project Enture Base PM Conditions Gulerrez Street at Garden Street	CAPACITY	3200 1600	3200	1600 1600 1600	1600 1600 1600	N/S Movements EW Movements Rt. Turn Component Yellow Clearance Rion(100)		
	LANES	0 + 2	070	#= 4= ←	~ ~ ←	N R R R R R P R P R P R P R P R P R P R	(201)	
PROJECT. AVALYSIS CONDITION INTERSECTION: DATE OF ANALYSIS:	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBL EBLT EBTR	WBL WBT WBR	NVS Moven ETW Moven Rt. Turn CA Yellow Cle. Yellow Cle. TOTAL CAPACITY UTHIZATION (ICU)		

ICU 1(Los	Level Of S 1(Loss as Cycle Lengt ************************************	Level Of Ser Cycle Length	Of Servi ength %)	Service Comp th %) Method ************************************	Computation thod (Futur ***********************************	Level Of Service Computation Report as Cycle Length %) Method (Puture Volume Alternative) ************************************	eport Volume Alte	; *	
Cycle (sec): 100 (Y-R=0 Dytimal Cycle: 78	100 100 10 10	00 10 (Y+R= 78	(X+R=0.0 sec)	* * * * * * * * * * * * * * * * * * *	********* Critical Average Level Of	1 Vol./ Delay f Servi	**************************************	******* 0. XXX	* * * * * * * * * * * * * * * * * * *
Street Name: Approach: Movement:	rth B	Garden Bound - R	n St Sou	× 🕮	Bound	+ E	*	******** B Ramps West L - 1	Bound
Control: Rights: Min. Green:	1 # #	mit de 0	0	ermit Inclu	ted de	Perm Perm Inc	Permitted Include 0 0	Permitted Include 0 0	ted ide
ranes:	7 O T			7	, T	0 0 0	о Э	0 11 0	1 0
Volume Module Base Vol:	e: 464 712	0		754	768	• -	- 0	143	285
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	i.	00 1.00	1.0	1.00
Added Vol:	70	0	0	40. C	80 0	> C	o c	143	787 C
~		0	0	0	0	0	0 0		0
Initial Fut:			0	754	L	0		143	285
User Adj: Bur Adi:	1.00 1.00	1.00	1.00	1.00	0.76	00.	٠.	٦,	0.51
FHE Volume:	464 712	00.1	00.1	754	584	1.00.1 0		143 0	145
Reduct Vol:		0	0	0	0	0			0
Reduced Vol:	464	0	0	754	584				145
PCE Adj:	щ.	1.00	1.00	1.00	1.00	.00	1.0	⊣	1.00
MLF Adj: FinalVolume:	464 712	1.00	1.00	1.00 754	1.00 584	1.00 1.00 0 0	0 1.00	1.00 1.00 143 0	1.00
ļ				1	1				1
Sat/Lane:	П	1600	009	1600	1600			1600 1600	1600
Adjustment:	-	1.00	00.	1.00	1.00	1.00 1.00	г		1.00
Lanes:	00.	00.0	00.	2.00	1.00				1.00
final Sat.:	1600 3200	0	0	3200	1600	0		1587 13	1600
city Ana	lysis Module					1			
. +47/		2	ç	× ×	2	9		000	

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Future Base	ма	Wed	d Feb 20,	2008 15	:47:11	!	Page	5-1
**************************************	(Loss as C******	Level Of Cycle Leng ************************************	Serv th %	ce Computation Method (Futur ***********************************	utation Report (Future Volume ***************	**	 rnative ******	* * * * * * * * * *
Cycle (sec): Loss Time (se	ec):		* 50.	critical Critical ec) Average Level Of		Cap.(X): (sec/veh	* - · · ·	**************************************
reet proac vemen	North L - T	Ga	St South L - T	ound - R	Eas Eas	US-101 Bound T - R	B Ramps West	Bound - R
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ted ted de 0	Protected Include 0 0 0 0 2 0 1 0	otected Include 1 0 0	Per l	Permitted Include 0 0 0	Permitted Include 0 0 0 0 0	tted ide 0 0
		108	8 8 8		449		0	
Growth Adj: Initial Bse:	1.00 1.00 0 721	1.00 108	1.00 1.00 539 415	1.00	1.00 1.	00 1.00	1.00 1.00	1.00
Added Vol:	00	00			00		00	00
Initial Fut:		108				32	0	00
User Adj: PHF Adj:	1.00 1.00	0.79	1.00 1.00	1.00	1.00 1.	.00 0.40	1.00 1.00	1.00
PHF Volume:		 	539			13	0	0
nced		985	539		449		0 0	
PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 1.00 1.00 0 721	1.00 1.00 85	1.00 1.00 1.00 1.00 539 415	1.00		.00 1.00 .00 1.00 0 130	1.00 1.00 1.00 1.00 0 0	1.00 1.00 0
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Module: 1600 1600 1.00 1.00 0.00 1.79 0 2861	1600 1.00 0.21 339	1600 1600 1.00 1.00 2.00 1.00 3200 1600	1600	1600 16 1.00 1. 2.00 0.	600 1600 .00 1.00 .00 1.00 0 1600	1600 1600 1.00 1.00 0.00 0.00	1,00 1,00 0,00
Capacity Ana. Vol/Sat: Crit Moves:	lysis Modul 0.00 0.25	0.25	0.17 0.26	* * * * * * * * * * * * * * * * * * * *	0.14 6.	80.0 0.08	***************	****

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Intersection # ***********************************	10) * `	Gutierrez	7 × × × × × × × × × × × × × × × × × × ×	and Olive	Olive :	St ******	*	* * *		*	* (*
Average Delay	*	********	*) * 0 *	*****	1910M	Case	Leve1 *****	OI Service	•• •	07 70	******
Street Name: Approach: Movement:	North L	H B	Olive Bound - R	S H	South Bo	Bound	- E	ast Bo	Gutierrez Bound - R L		st T	Bound - R
Control: Rights: Lanes:		op Sign Include 0 0	Sign lude 0 0	. O	Stop Sign Include 0 0 1	Sign clude) 1 0	oup o	0 0 0	11ed 1de	o .	Uncontrolled Include 1 0 1 0	olled ade
e Modul							<u>-</u>					
Base Vol: Growth Adi:	85	27	1.00	1.00	1.00	175	000	0 0	0001	12	699	43
Initial Bse:			0	•	9	175	i		•	12	-	43
Added Vol:	0 0	0	0 0	0 0	0 (0 (0	0 (0	0 (0
Fasserbyvol: Initial Fut:	ວພ) -	o c	00	⊃ œ	175	o c	-	> C	0 ^		ဝင္
	1.001	000	1.00	1.00	1.00	1.00	1 0	1,00	1.00	1.00	1.00	
PHF Adj:	1.00 1	00.	1.00			1.00	H					
PHF Volume:	8	27	Φ.	0	68	175	0 1	0	0	12		
Keduct Vol:	Э <u>ш</u>	י כ	φ ¢	00	0 0	14 0	0 0	\$	0 0	٥٢	0 0	o ;
- THAT VOLUME:	ם מ	, ,) 	⊃ <u>i</u> - -	0 1	0/1) - -	i د ا	⊃ ! !	77	ו פ ו פ	2. 1
Critical Gap Critical Go:	Mod 7.	. 9	××××	××××	Ġ		- XXXXX	××××	- XXXXX		XXXX	****
н	in.		XXXXX	XXXXX	4.0	L.	XXXXX	×××	××××	2 2	XXX	***
			-		- 1	1	-	į	-			
Capacity Module Cnflict Vol: 4	11e: 408	766	XXXXX	xxxx	745		××××	xxxx	· xxxxx		×××	xxxxx
Potent Cap.:	558	335	XXXXX	XXXX	345	619	XXXX	XXXX	XXXXX	900	XXXX	XXXXX
Move Cap.:	347	331	xxxxx	XXXX	340	619	XXXX		XXXXX	900	XXXX	XXXXX
Volume/Cap:	0.25 0	0.08	XXXX	xxxx	0.20	0.26	××××	XXXX	XXXX	0.01	××××	××××
er.	vice Module	dule								i -		
2Way95thQ:	××××	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	0.0	XXXX	XXXXX
Control Del:>	Del:xxxxx x	xxxx	XXXXX	XXXX	XXXX	XXXXX	XXXXX	××××	XXXXX	9.1	XXXX	XXXXX
LOS by Move:	¥ Ę	* 5	* E	* E	* É	* 6	* E		* E	∢.	* 5	* 6
Shared Can .		444		1 22	477	1 2 2	٠,	4 T T	- M.	4 3	4 FF	- K.
SharedOueue:	1.4	XXXX	XXXXX	XXXXX	XXX	2.4	XXXXX	XXX	XXXXX	0.0	4 × × × × × × × × × × × × × × × × × × ×	XXXXX
Shrd ConDel:		XXXX	XXXXX	XXXXX	XXXX	17.4	XXXXX	XXXX	XXXXX	6	XXXX	XXXXX
Shared LOS:		*	*	*	*	O	+	*	*	ď	+	*
ApproachDel:	8	20.5			17.4		ž	XXXXX		S	XXXXXX	
Annyon-blocking.		Ç			(,				

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Wed Feb 20, 2008 15:47:11

Future Base PM

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**************************************	N *			t	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
* ÷ · · · ·	Gutierrez St	Level OI Service Computation Cycle Length %) Method (Future	Method (F)	₩ > +	o) + -	nativ ****	* * * * * * * * * * * * * * * * * * * *
me:	100 10 (Y+R	0 sec)	Critical Average Level Of	: _ ^:	**************************************	0.422 3.422 3.422 3.422	(XX
□ .	lle ound -	Chavez South L - T	ω.	East L - T	Gutierrez Bound	St West - T	* 0
Control: Rights: Min. Green: 0 Lanes: 1	Permitted Include 0 0 0	Permitted Include 0 0 0	ted de 0	Perm Inc 0	Permitted Include 0 0	Permitted Include 0 0 0 0 0	ted ide 1 0
Volume Module:	ł.		-			-	
Base Vol: 85 Growth Adi: 1.00	1.00 1.00	1.00 1.00	89 1.00	1.00 1.0	0 0 0	1.00 1.00	39
٠	105	00			4	29.	φ. φ.
VOL: BvVol:		00	00) C	00		00
	105		69	0	0	40	9 69
Adj: 1	1.00 1	1.00 1.00		.00	-4	Η	0.81
PHF Adj: 1.09 PHF Volume: 85	1.00 1.00	1.00 1.00	1.00	1.00 1.00	00 1 00	1.00 1.00	1.00
ct Vol:	0		30	0		00	20
uced Vol:	105		9				32
Adj: 1	1.00 1	7	1.00	_	1.0	7	1.00
Mir Adj: 1.00 FinalVolume: 85	105 100	1.00 1.00 0 92	1.00	1.00 1.00 0 0	0 1.00	1.00 1.00 29 496	1.00
Saturation Flore M.	or Module:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
4	1600 1600	1600 1600	1600	1600 1600	00 1600	1600 1600	1600
Adjustment: 1.00	1.00 1	00.	1.00	.00	,⊷;	.00	1.00
r-(-	1.00 0.0	0.00 0.61	0.39	0.00 0.00	0.0	Н	0.11
Final Sat.: 1600	1600 0	0 971	629	0	0	$^{\circ}$	182
Capacity Analysis	Module:		_ 1 6 1 6	I) 		\$
	0.0	****		0.00 0.00	00.00	0.02 U.I./	\T.0

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CUMULATIVE PROJECT CONDITIONS

# 	Change in	+ 0.000 v/c	+ 0.000 v/c	+ 0.000 V/C	+ 0.000 b/v	+ 0.000 V/C	
	Future Del/ V/	C XXXXX 0.765	B xxxxx 0.620	A xxxxx 0.510	C 15.9 0.000	A xxxxx 0.481	
nalysis Report Of Service	Base Del/ V/	C xxxxx 0.765	B xxxxx 0.620	A xxxxx 0.510	C 15.9 0.000	A xxxxx 0.481	
1		and Garden St	8 Ramps and Garden St	8 Ramps and Garden St	St and Olive St	: St and Calle Cesar C	
	Intersection	# 1 Haley St	# 3 US-101 NB	# 4 US-101 SB	# 5 Gutierrez	# 6 Gutlerrez	
	 	Impact Analysis Report Level Of Service Base Future Chan Del/ V/ to in	Impact Analysis Report Level Of Service Base Future Chan DeJ V/ DelJ V/ in LOS Veh C LOS Veh C t and Garden St C xxxxx 0.765 C xxxxx 0.765 + 0.000	Impact Analysis Report Level Of Service Base Del/ V/ LOS Veh C C xxxxx 0.765	Impact Analysis Report Level Of Service Base Del/ LOS Veh C C XXXXX 0.765 rden St B XXXXX 0.620	Impact Analysis Report Level Of Service Base Dal/ V/ LOS Veh C xxxxx 0.765 rden St B xxxxx 0.510 st C 15.9 0.000	Impact Analysis Report Level Of Service Base Del/ V/ LOS Veh C C xxxxx 0.765 cden St B xxxxx 0.510 rden St A xxxxx 0.510 st C 15.9 0.000 Cesar C A xxxxx 0.481

Intersection #1	#1 Haley St and	<pre>iCU 1(Loss as Cycle Length %) Method (Future Volume Alternative) ************************************</pre>	vice Computation Report %) Method (Future Volume Alte ************************************	Alternative) **********
Cycle (sec): Loss Time (sec) Optimal Cycle:	100 (Y+)	00 10 (Y+R=0.0 sec) Average 60 Level Of	Critical Vol./Cap.(X): Average Delay (sec/veh) Level Of Service:	0.765 0.765 0.765
Street Name: Approach: Movement:	North B	th t	k (20)	y St West Bound L - T -
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 0 0 0 0 0 0 0	Permitted Include 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Permitted Include 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Permitted Include 0 0 0 0 0 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol:	372 1.00 1.00 1 0 372 0 0	48 403 1.00 1.00 1.0 48 403 0 0	21 435 222 1.00 1.00 1.00 21 435 222 0 0 0	1.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
,,		1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	435 1.00 1.00 435 0.1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
LIVolume Lane: Lane: stment:	Elow Module: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 0.75 845	1600 1600 1600 1.00 0.00 0.21 1.79 0.00 0.34 1.2859	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1600 1600 1600 1.00 1.00 1.00 1.00 1.00
ty Anal	Module 0.49	0.03 0.14 0.0	0.14	0.0

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INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

Device Secretary and a second			·····											baccered						
	AM PEAK HOUR LUME V/C	0.101	0.000	0.000 *		0.000 0.000	0.000	0.079	0.355 *	0.428	0.355	0.000	0.100	0.881 D	SOT	∢ :	m	U C	эш	ட
) dect	AM PE VOLUME	323 681	0	0 511	16	00	0	126	568 296							0.600	0.700	0.800	1.000	an B
es:															D C		,		1	
535 E. Montecito Street "Los Portales" Project Cumulative Project AWI Conditions Gulferrez Street al Garden Street																0.100	0.601	0.701	0.901	1.001
oject A et at G										y	ųΨ	onent	9							
535 E. Monteciro Street. Los Porr Cumulative Project AM Condition Gulferrez Street at Garden Street 02/12/08	CAPACITY	3200		3200				1600	1600 1600	N/S Movements	E/W Movements	Rt. Turn Component	Yellow Clearance	ion (icu)						
3 FF 16 (1)	LANES	2 +	0	0 7	0	00	0	₩.		2	_ 0.1	ıL	,	UTILIZAT SE (LOS)						
PROJECT. ANALYSIS CONDITION NATERSECTION: DATE OF ANALYSIS:	MOVEMENT	NBL TBN	NBR	SBL	SBTR	EBL	EBTR	WBL	WBT WBR					TOTAL CAPACITY UTILIZATION (ICU) LEVEL OF SERVICE (LOS)						

								1			
ICU 1(LOSS as	Less as Cyc	Level O Cycle Le	Of Serv	Service Computh 8) Method		(i) +	Report Volume	ψ *	rnat ****	ive) *****	* *
Intersection #3	#3 US-101 NB Ramps and Garden St	AB Ramps	pue sdi	Garden	******	****	* * *	***	***	***	*
Cycle (sec): Loss Time (sec): Optimal Cycle:): (sec): 100 cle: 42	100 10 (Y+R=0.0 42	(Y+R=0.0 s	sec)	Critical Vol./Cap. Average Delay (sec Level Of Service:	al Vole Dela	Vol./Cap.(X) Delay (sec/ve	(X): c/veh)	× :(0.620 xxxxxx	620 xxx B
Street Name: Approach: Movement:	모	Garden Bound - R	in St.	. <u>.</u> .	und - R	. H	East Bol	101 nd	r Rg 1	¥ [∺	Bound - R
Control: Rights: Min. Green: Lanes:	Prot+Permit Include 0 0 0	mit de 0 0	0	Permitted Include 0	ted de 0	0 0	ermit Inclu	ted de 0	0 0	Permitted Include 0	ted ide 0
뉨		0	0	519	615	-	0	0	133	0	254
Growth Adj: Initial Bse:	1.00 1.00 223 804	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00
· · ·		000	00	1	00	00	000	000	000	000	, 0 0
Initial Fut:		0	0	519	615			0	133	0	254
User Adj: PHF Adj: PHF Volume:	1.00 1.00 1.00 1.00 223 804	1.00	1.00	1.00	1.00	1.89	1.00	989	1.00	1.00	1.00
Ċţ.		0	0	0	0	00	0	0	0	0	1
Reduced Vol: PCE Adj:		1.00	1.00	$\frac{519}{1.00}$	467	1.00	1.00	1.00	133	1.00	142
îna ina	1.00 1.00 223 804	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
i		1600	1600	1600	1600		1600	1600	1600	1600	1600
djustm anes: inal S	1.00 1.00 1.00 2.00 1600 3200	1,00 0.00 0	0.00	1.00 2.00 3200	1.00	0.00	0.00	0.00	1.00 0.97 1546	1.00 0.03 54	1.00 1.00 1600
Capacity Analysis	ysis Module:	0.00	0,00	0.16	0.29	0.00	0	1 00	80	6	0.09

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TCU 1 (Loss	(Loss as		f Service ngth %) Me	ice Compu	mputal	Computation Report thod (Future Volum	teport Volume Al	Level Of Service Computation Report ycle Length %) Method (Future Volume Alternative ************************************	* * * * * * * * * * * * * * * * * * * *	*
	તા ∗	SB Ramps and Garden St ************************************	ss and *****	Garde	ST ***	****	***	US-101 SB Ramps and Garden St ***********************************	* * * * * * *	* *
Cycle (sec): Loss Time (sec Optimal Cycle:	* * * * * * * * * * * * * * * * * * *	10 (Y+R=0.0 sec) 34 ***********************************	(Y+R=0.0 s	sec) }	Critical Average [Level Of *******	al vol./Cap = Delay (se of Service:	Vol./Cap.(X/: elay (sec/veh) Service: *******	***************************************	****** ******	*
Street Name: Approach: Movement:	Ga North Bound L - T -	Garden ound - R	S	0	nd R	East		SB Ramps West L - I	t Bound T -	_ ¤
Control: Rights:	 Permitted Include	I	I Z	Protected Include	- D e		mit clu	 - -	Permitted Include	1
Min. Green: Lanes:	000	1 0 0	2 0	1 0	00	0 0	1:01	000	000	00
Volume Module:		-	1	1	1		 		1 1	-
Base Vol:	0 382	58	289	334	0			0 8	0	0
Growth Adj: Initial Bee:	1.00 1.00	1.00	1,00	334	1.00	1,00 1. 588	00.1.00.	0 1.00 1	.00.	90
Added Vol:	0		0	0	0	0	0	0	0	. 0
PasserByVol:	0		0	0	0	0		0	0	0
Initial Fut:	0		289	334	0			0	0	0
User Adj:	00.	0 ,	1.00	1.00	1.00		.00 0.67	1.00 1	.00	00.1
PHF Adj:	1.00 1.00	1.00 55	789	334	00.1	1.00.1 1.00.1	00 T 00	1 00.1 0	 00.	3.0
Reduct Vol:	0		0	0	0	0	0	0	0	0
Reduced Vol:			289	334	0			0 4	0	0
PCE Adj:	-	٠,	1.00	1,00	1.00	Η.		1.00 1	Η.	00.
MLF Adj: FinalVolume:	1.00 I.00 0 382	1.00	1.00	334	1.00	1.00 L. 588	.00 1.00 0 267	T 00.T	.100.	00.
	-1				1	1	1			-
	1600 1600	1600	1600	1600	1,600	1600 16	1600 1600	1600	1600 16	1600
Adjustment:	1.00 1.00			1.00	3.00			1.00	-	1.00
Lanes:		0	2.00	1.00	00.0		0.00 1.00	00.0	0.00 0.	00.
Final Sat.:	0 2800	400	3200	1600	0	3200	0 1600	0 0	0	0
Capacity Analysis		le:		,	-		i			_
Vol/Sat: Crit Moves:	\$1.0 00.0 ****	0.14	* * *	77.0	0.00		7T.0 00.0	00.0	0.00.0	00.0
*****	*******	***	******	****	* + + * *	*****	***	******	*****	*

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**************************************	2009 HCM Unsignalized Method (Future ************************************	Unsignalized ************************************	12ed Ma ****** and 0.	Method ******* Olive S	(Future *******		ne Al ****	Volume Alternative)	*	* * * * *	* *
**************************************	**************************************		* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	******* Worst	Case Level	****** Level	**************************************	* **	* " *	5.9]
Street Name: Approach: Movement:	O North Bound L - T -		ve St Sou	도는	Bound F - R	L Eas	<u> </u>	Gutierrez Bound I - R L	ഗായ		und - R
Control: Rights: Lanes:	Stop Sign Include	op Sign Include 0 0 0	5 0	Stop Sign Include	gn Ide	Uncc O O	Uncontrolle Include 0 0 0	11ed de 0	Unice	Uncontrolled Include 1 0 1 0	lled de
Volume Modul	e: 33 2	1 00	- 0	5 G	1118	000	00	000	14	563	200
Initial Bse:	33 22		•		118	0				563	20
Added Vol: PasserByVol:	o	00	00	00	0 0	00	o 0	00	00	00	00
Initial Fut:	33	,			11	0 9	0 (4	56	20
User Adj: PHF Adj:	-1 ₍₋₁	1.00	1.00	1.00	1.00	1.00.1	1.00	1.00	1.00	00.1	1.00
PHF Volume:	E. C				118		0	0		56	20
Reduct vol: FinalVolume:	33 7	4 0	00) 66 0	118	0	> 0	00	140	ი 563	20
Critical Gap	Module:	X X X X X X X X X X X X X X X X X X X	****	6	1 .			1 2	-		
H		0 xxxxx		4.0	່ຕຸ		XXXX	XXXXX		XXXX	XXXXX
Capacity Modul Cnflict Vol:	359 611	XXXXX	× × × ×	601	292	XXX	, x x	- XX	. 000	XXXX	XXXXX
Move Cap.;				410			XXXX	XXXXX		XXXX	XXXXX
Volume/Cap:	0.08 0.0	y xxxx	××××	0.24	\circ	K XXXX	XXXX	XXXX		XXXX	XXXX
Level Of Serv	- 5	O)				1		_ ! !			
ZwayysthQ: Control Del:	XXXX XXXX	XXXX	XXXX	XXXX	XXXXX		XXXX	XXXXX	0.0	XXXX	XXXX
LOS by Move:			*	*	*	\ \ \ \ \	*	***		* *	****
Movement:		S - RT	LT	LTR	- RT	LT -	LTR	- RŢ	LT -	LTR	- RT
Shared Cap.: SharedOueue:	406 xxxx 0.5 xxxx	XXXXX X	XXXX	XXXX	1,9	x xxxx	XXXX	XXXXX	XXXX	XXXX	XXXXX
Shrd ConDel:			XXXX	×××	15.9		XXXX	××××		XXXX	XXXXX
ApproachDel:	13		ı	15.9	د		xxxxx	k	*XX	xxxxx	×
Approachtos:	ر			ر			×			¥	

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Page 2-1	1 1 1 1	Change in	100 V/C	00 V/C	100 V/C	00 D/V	00 V/C
Page		ប់	+ 0.c).O +)·0 +	+ 0.0	+ 0.0
Page 2		Future Del/ V/	LOS Veh C C xxxxx 0.755 + 0.000 V/C	D xxxxx 0.846 + 0.000 V/C	B xxxxx 0.663 + 0.000 V/C	C 21.2 0.000 + 0.000 D/V	A xxxxx 0.429 + 0.000 V/C
Wed Feb 20, 2008 15:47:34	Impact Analysis Report Level Of Service	Base Del/	LOS Veh C xxxxx 0.755	D xxxxx 0.846	B xxxxx 0.663	C 21.2 0.000	6 Gutierrez St and Calle Cesar C A xxxxx 0.429
1 !	Impact ? Level		en St	3 US-101 NB Ramps and Garden St	4 US-101 SB Ramps and Garden St	Olive St	Calle Cesar C
oject PM			and Gard	Ramps a	Ramps at	St and (St and (
Future With Project PM		Intersection	1 Haley St and Garden St	US-101 NB	US-101 SB	5 Gutierrez St and Olive St	Gutierrez
Futu		Inte	#	⊕	#-	#	φ #=

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Intersection	(Loss as ******* #1 Haley	Level O Cycle Le *******	Of Servi Length %) ********	Service Compi th %) Method *********	1 3 3	tation F (Future	100>*	* * * * *	rnati *****	 	
Cycle (sec): Loss Time (sec) Optimal Cycle:	*	100 10 (Y+B	100 (Y+R=0.0 sec)		critic Critic Averag Level	cal Vol	**** ./Ca ./Ca vice	* * > .	* * * * * * * * * * * * * * * * * * *	* × :	* * 52 X D
Street Name: Approach: Movement:	North L - T	Garden Bound - R	n St Sou L -	th B	und - R	. H	ast Bo	Bound Bond	ال	* ±	Bound F - R
Control: Rights: Min. Green: Lanes:	Permitted Include 0 0 0 1	ted ide 10	0 0	Permitted Include 0	ted de de	0 0	Permitted Include 0	ted tde 0	- 00	Permitted Include 0	ted de 0
Volume Modul Base Vol:	e: 0 394	298	49	566	00		641	404	1	0 9	1
Initial Bse:		298	49	566	9.1	20	641	404	00.1	1.00 0	20
Added Vol: PasserBvVol:	00	00	00	0 0	0 0	00	00	00	00	00	00
Initial Fut:	0	298	49	566	0	20	64	404	0	0	0
User Adj: PHF Adj:	1.00 1.00	0.92	1.00	1.00	1.00	1.00		0.85	1.00	1.00	1.00
PHF Volume:		274	6.0	566	0	20	64	343	•	0	
Reduct vol: Reduced Vol:	394	274	0 6	566	00	0 0	641	343	00	0 0	00
		1.00	1.00	1.00	1.00		1.00	1.00	1.00	0	1.00
FinalVolume:	0 394	274	1.00	566	00.1	7.00	641	343	1.00	1.00	1.00
turation F t/Lane:	low Module: 1600 1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00			1.00
Final Sat.:	90	657	255	1.84 2945	00.00	97.	3103	1600	0 0 0	00.0	0.00
Capacity Ana.	Analysis Modul		-					-	1	i 	

INTERSECTION CAPACITY UTILIZATION CALCULATION WORKSHEET

535 E. Montectro Street "Los Portales" Project Cumulative Project PM Conditions Gütterrez Street at Garden Street	PM PEAK HOUR VOLUME V/C	2200 351 0.110 * 600 652 0.408 0 0.000	0.000 934 0.309 • 56 0.000	0 0,000 0 0,000 0 0,000	600 111 0.069 600 514 0.321 * 600 325 0.203	outs 0.419 component 0.321 Component 0.000 learance 0.100 U)	SOT ICN	0.100 - 0.600 A 0.601 - 0.700 B 0.701 - 0.800 C 0.801 - 0.900 D
535 E. Monteci Cumulative Pic Gutlerrez Stree 02/12/08	CAPACITY	3200 1600	3200		1600 1600 1600	N/S Movements E/W Movements Rt. Turn Component Yellow Clearance		
	LANES	0 - 10	0 7 0	000	₩ + +	TY UTILIZAT		
PROJECT. AWALYSIS CONDITION INTERSECTION: DATE OF AWALYSIS:	MOVEMENT	NBL NBT NBR	SBL SBT SBTR	EBLT EBLT EBTR	WBL WBT WBR	NVS Mover ENV Mover Rt. Turn Cc Yellow Clec TOTAL CAPACITY UTILIZATION (ICU)		

ICU 1 (Los	(Loss as	# D + D	Level Cycle Le	1 Of Servi Length %) **********	Service Comp th %) Method ************************************	Level Of Service Computation Report Cycle Length %) Method (Future Volume ************************************	tation R (Future *******	Report Volume) +	Alternative	* * * * * * * * * * * * * * * * * * *	
Cycle (sec): Loss Time (sec) Optimal Cycle:	* : (O O : 1	* * * * * * * * * * * * * * * * * * * *		* o :	* (U + U + U + U + U + U + U + U + U + U	**************************************	cal Vol./ ye Delay of Servi	********** Vol./Cap.(X) elay (sec/ve Service:	Cap. (X): (sec/veh)	*	0.846 xxxxxx	*
Street Name: Approach: Movement:	. I. No.	North Bo	, O E	. S. J	t South Bound - T -	ound East Bound R I T R	* H	st Bo	VS-101 N Bound	¥	, p	Bound
Control: Rights: Min. Green: Lanes:	Pro	Prot+Permit Include 0 0	mit ide o		Permitted Include 0	ted ide	4 0	ermit Inclu	ted de	4 0	ermit Inclu	de de
Volume Modul	- 6		-							1		-
₹		718	o	0		771	0	0	0	143	0	286
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1,00	1.00	1.00	1.00	1.00
Added Vol:	# C	ρ ()	00	00	cc,	T C	00	-	o c	143 0	00	286
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
	464		0	0		771	0	0	0	143	0	286
User Adj:	1.00		1.00	1.00		0.76	1.00	1.00	1.00	1.00	•	0.5
PHF Volume:	464	718	9.0	00.1	7.55	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ct Vol	50	9 0	0	0	2	90	0	00	> C	2.0	o c	140
Reduced Vol:	464	718	0	0	755	586	0	0	0	143	0	146
	1.00		1.00	1.00	_	1.00	1.00	1,00	1.00	1.00	1.00	1.00
MLF Adj:	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
TO T	105) 		- -	0 1	200) 	i !	o !	14.5	>	14 b
uo	Flow Module	dule:	-	-		-			!			
Sat/Lane:	1600		1600	1600		1600		1600	1600		1600	1600
Adjustment:	1.00		1.00	1.00		1.00	00.	1.00	1.00		1.00	1.00
	1.00		0.00	0.00	2.00	1.00		00.0	0.00		0.01	1.00
Final Sat.:	1600	3200	0	0.	3200	1600	0	0	0	1584	16	1600
acity Ana		Modul			 	! !	i i i		-		İ	

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Future With	Project	Σ 	Wed	Ser	i 1	Computation) L I	Report			
ICU 1(************************************	N * 4 4	4 * * * * * * * * * * * * * * * * * * *	C1 * C1	* 51 4		7 * 07	{Future Vol.	Volume	0 * +	rnative)	* * * * * * * * * * * * * * * * * * * *
Cycle (sec): Loss Time (sec) Optimal Cycle:	÷ ÷	100		0.0	φ +	Critical Average Level Of	De S		× × ×	· X +	0.663 XXXXX
eet N roach ement	North L -	- ←	Garden Bound - R	ഗ പ	- E		. H	East Bo	-101 und	Ramps West 1 - T	Bound
Control: Rights: Min. Green: Lanes:	0 0	ermitted Include 0	ted de 0 1 0 1 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0	Pr Pr	Protected Include 0 0 0	ed o o o o	1 0 I	Permitted Include 0 0 1:0	de 0 0	Permitted Include 0 0 0	tted 1
volume Modul Base Vol: Growth Adj: Initial Bse:	 	721 1.00 721	108 1.00 108	539 1.00 539	415 1.00 415	1.00	455 1.00 455	1.00	324 1,00 324	1.00 1.00	1.00
Added Vol: PasserByVol: Initial Fut:	000	0 0 721	0 108	539	0 415	000	0 0 455	000	0 0 324	000	000
User Adj: PHF Adj: PHF Volume:		1.00 1.00 721	0.79 1.00 85	1.00 1.00 539	1.00 1.00 415	1.00	1.00	1.00	0.40 1.00 130	1.0	1.00
Reduct vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	1,00	721 1.00 1.00 721	85 1.00 1.00	1.00 1.00 1.00 1.33	415 1.00 1.00 415	1.000	455 1.00 1.00 455	1.00	130 1.00 1.00	1.00 1.00	1.000
Saturation E. Sat/Lane: Adjustment: Lanes:	1600 1600 1.00 0.00	Module: 0 1600 0 1.00 0 1.79 0 2861	1600 1.00 0.21 339	1600 1.00 2.00 3200	1600 1.00 1.00 1600	1.000	1600 1.00 2.00 3200	1600	1,000	1600 1600 1.00 1.00 0.00 0.00	1.00 1.00 0.00
pacity Ana 1/Sat: it Moves:	lysis 0.00	Modul 0.25	e: 0.25	0.17	0.26	00.0	0.14	00.00	80.08	00.0 0.00	0.00

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**************************************	resz Sr ****** ****** ound Oli ign ude 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	and Olive								
Delay ** ame: L); ****** ound ign ude 0 0 1,00		n ≯	St *****	* * *	*****	***	****	****	***
L	71 4 0 000	6.3	***	Worst	Case]	Level	Of Service:	Service:	C[21	*:2]
Stop 0 1 nc 0 1 c dule:		ve St Sou L	outh Bound - T -	und - R	- Б	East Bo - T	Gutierrez Bound I - R L		St West Bound - T -	und - R
dule:	i.	St.	d ii	gn ide	oun o	Uncontrolle Include 0 0 0	olled Jde O O	Unc Unc	Uncontrolled Include 1 0 1 0	11ed de 1 0
87	ij.	-	! ! !	 	; ! ! !		!			1
	Ţ,		74	175	0	O	0	12	702	43
Growth Adj: 1.00 1.00 Initial Res: 87 28		1.00	3.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00
h; 0		0	0	0	0 0	00	0	0	0	
Vol: 0		0	0	0	0	0	0	0	0	0
ut: 87				175				12	702	<u>4</u> .
User Adj: 1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	•	1.00	1.00
Volume: 87	4	0.1	74	175		-		1.00	702	43
ct Vol:		0	0	0	0	0	0	0	0	.0
nalVolume: 87		0	74	175	۰.	0	0	12	702	4
Critical Gap Module:		!		-	-		1			-
Gp: 7.1 6.	XXXXX	XXXXX	6.5	6.2	XXXXX	XXXX	XXXXX	4.1	XXXX	XXXXX
FollowUpTim: 3.5 4.0	XXXXX	XXXX	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	XXXX	XXXXX
Curacity Module.		 	! ! !	 		1	1		 	1
Cnflict Vol: 412 769	XXXXX (XXXX	748	373	XXXX	XXXX	XXXXX	0	XXXX	XXXXX
.: 554 3			344	678	XXXX	XXXX	XXXXX	900	XXXX	XXXXX
338	×	xxxx	339	678	XXXX	XXXX	XXXXX	900	XXXX	XXXXX
Volume/Cap: 0.26 0.09	××××	××××	0.22	0.26	XXXX	XXXX	XXXX	0.01	XXXX	××××
Level Of Service Module			1		-					
othQ: xxxx	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	0.0	XXXX	XXXXX
Control Del:xxxxx xxxx	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	9.1	XXXX	XXXXX
*				*	*	·k	*	Æ	*	*
it: LT -	A - RT	- 1	LIR	- RT	LI	- LTR	- RT	Ľ	LIR	- RT
336			XXXX	523	XXXX		XXXXX	XXXX	XXXX	XXXXX
dQuene; 1.5			XXXX	2.5	XXXXX	XXXX	XXXX	0.0	XXXX	XXXXX
Shrd ConDel: ZL.Z XXXX	***** >	××××	××××	 	XXXX	××× ×	XXXXX	ກ່	×××	XXXXX
ءَ د		ı	0	ر	. 5					,
	.1				ė.	**		ર	***	
********	*****	*****	*	****	****	*****	*****	*****	****	****

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APPENDIX C RELATED PROJECT LIST

Trip Generation Worksheet - With In/Out Splits 535 EAST MONTECITO STREET PROJECT
 Pass-by
 ADT
 A.M. Peak Hour
 P.M. Peak Hour
 Peak Hour

 Factor
 Rate
 Trips
 Rate
 Trips
 In %
 Trips
 Out %
 Trips
 Rate
 Trips
 In %
 Trips
 Out %
 Trips
 CITY PROJECTS - RESIDENTIAL
Net change of 5 or person Land Use 70 -47 35 53 47 1.00 1.00 1.00 1.00 1.00 5.86 5.86 5.86 5.86 5.86 0.440 0.440 0.440 0.440 0.440 17% 17% 17% 17% 17% 83% 83% 83% 83% 83% 0.52 0.52 0.52 0.52 0.52 67% 67% 67% 67% 67% 4 -3 2 3 3 33% 33% 33% 33% 33% 5 -4 3 4 4 4 -3 2 3 3 Project Total: 158

- Projects List: 21 E Anapamu 222 W Yanonali 211 Castillo 517 Figueroa 203 Chapala

	535 EAST MONTECITO STR	EET PROJECT															
			Pass-by	AD	- 1			A.M. Pea	de III-een					P.M. Pea	1.11		
	Land Use	Size	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
	CITY PROJECTS - MIXED U		, actor	rtuto	pc	rtuto	pc	,	po	Out 70	торо	rtuto	po	/0	,	Out 70	торо
	Net change of 5 or more Re	sidential Units of	Lots/ 1000 S	Sa-Ft. non	Residenti	al											
1.	Res. Condo	6	1.00	5.86	35	0.440	3	17%	1	83%	2	0.52	3	67%	2	33%	1
	Retail	2.872	1.00	46.55	134	1,400	4	60%	2	40%	2	4.55	13	43%	6	57%	7
2.	Res. Condo	7	1.00	5.86	41	0.440	3	17%	1	83%	2	0.52	4	67%	3	33%	1
	Retail	2.000	1.00	46.55	93	1,400	3	60%	2	40%	1	4.55	9	43%	4	57%	5
3.	Res. Condo	5	1.00	5.86	29	0.440	2	17%	0	83%	2	0.52	3	67%	2	33%	1
	Retail	1,824	1.00	46.55	85	1.400	3	60%	2	40%	1	4.55	8	43%	4	57%	4
4.	Res. Condo	14	1.00	5.86	82	0.440	6	17%	1	83%	5	0.52	7	67%	5	33%	2
	Office	2.110	1.00	22.66	48	2.970	6	86%	5	14%	1	3.40	7	18%	1	82%	6
5.	Mental Health Association AT	E #03154			427		53		36		17		57		16		41
6.	Affordable Housing Project #0	04026			119		-1		-1		0		-2		-1		-1
7	Res. Condo	7	1.00	5.86	41	0.440	3	17%	1	83%	2	0.52	4	67%	3	33%	1
	Retail	6,375	1.00	46.55	297	1.400	9	60%	5	40%	4	4.55	29	43%	12	57%	17
8	SFD	???															
	Retail	-5.507	1.00	46.55	-256	1.400	-8	60%	-5	40%	-3	4.55	-25	43%	-11	57%	-14
	Res. Condo	10	1.00	5.86	59	0.440	4	17%	1	83%	3	0.52	5	67%	3	33%	2
	Retail	11,507	1.00	46.05	530	1,400	16	60%	10	40%	6	4.27	49	43%	21	57%	28
9	Office	-18,700	1.00	19.62	-367	2.620	-49	86%	-42	14%	-7	2.89	-54	18%	-10	82%	-44
•	Office	9,500	1.00	22.66	215	2.970	28	86%	24	14%	4	3.40	32	18%	6	82%	26
	Res. Condo	18	1.00	5.86	105	0.440	8	17%	1	83%	7	0.52	9	67%	6	33%	3
0	Radio Square Mixed Use Pro		1.00	0.00	255	0.110	22	,0		0070		0.02	22	0.70	•	0070	Ŭ
21	Office	-7.245	1.00	22.66	-164	2.970	-22	86%	-19	14%	-3	3.40	-25	18%	-4	82%	-21
	Retail	2,000	1.00	46.55	93	1.400	3	60%	2	40%	1	4.55	9	43%	4	57%	5
	Res. Condo	2,000	1.00	5.86	53	0.440	4	17%	1	83%	3	0.52	5	67%	3	33%	2
22	Res. Condo	8	1.00	5.86	47	0.440	4	17%	1	83%	3	0.52	4	67%	3	33%	1
_	Retail	3,198	1.00	46.55	149	1.400	4	60%	3	40%	1	4.55	15	43%	6	57%	9
3	Retail	-15.371	1.00	45.23	-695	1.360	-21	60%	-13	40%	-8	3.80	-58	43%	-25	57%	-33
	Res. Condo	15	1.00	5.86	88	0.440	7	17%	1	83%	6	0.52	8	67%	5	33%	3
	Retail	14.168	1.00	45.44	644	1.360	19	60%	12	40%	7	3.92	56	43%	24	57%	32
4	Office	-35,841	1.00	16.89	-605	2.300	-82	86%	-71	14%	-11	2.43	-87	18%	-16	82%	-71
	Retail	23,091	1.00	44.41	1.025	1.330	31	60%	18	40%	13	3.33	77	43%	33	57%	44
	Res. Condo	29,031	1.00	5.86	170	0.440	13	17%	2	83%	11	0.52	15	67%	10	33%	5
25	Office	-7,343	1.00	22.66	-166	2.970	-22	86%	-19	14%	-3	3.40	-25	18%	-4	82%	-21
	Res. Condo	6	1.00	5.86	35	0.440	3	17%	1	83%	2	0.52	3	67%	2	33%	1
	Retail	4.615	1.00	46.55	215	1.400	6	60%	4	40%	2	4.55	21	43%	9	57%	12
6	Retail	-244	1.00	46.55	-11	1.400	0	60%	0	40%	0	4.55	-1	43%	0	57%	-1
•	Res. Condo	2	1.00	5.86	12	0.440	1	17%	0	83%	1	0.52	i 1	67%	1	33%	0
	Retail	2,195	1.00	46.55	102	1.400	3	60%	2	40%	1	4.55	10	43%	4	57%	6
7	N/A*	2,190	1.00	-0.00	102	1.400	3	00 /0	2	70 /0		7.00	10	70/0	4	31 /0	U
8	Office	-1,956	1.00	22.66	-44	2.970	-6	86%	-5	14%	-1	3.40	-7	18%	-1	82%	-6
	Res. Condo	-1,930	1.00	5.86	47	0.440	4	17%	1	83%	3	0.52	4	67%	3	33%	1
	Retail	18.713	1.00	44.79	#REF!	1.340	25	60%	15	40%	10	3.55	66	44%	29	56%	37
9	Retail	15,000	1.00	44.79	#REF!	1.400	25	60%	13	40%	8	4.55	68	44%	30	56%	38
	Res. Condo	15,000	1.00	5.86	170	0.440	13	17%	2	83%	11	0.52	15	67%	10	33%	5
0	Paseo De La Playa	29	1.00	5.00	3730	0.440	44	17 70		0576	(1	0.32	223	01/0	10	33 %	5

Projects	List
4.4	E 4

11.	517 Chapala	21	117 W De La Guerr
12.	523 Chapala	22	803 N Milpas
13.	110 E Cota Street	23	1025 Santa Barbara
14.	121 W De La Guerra	24	318 State
15.	617 Garden	25	116 E Yanonali
16	401 Chapala	26	518 State
17	412 Anacapa	27	1221 Anacapa
18	630 Anacapa	28	800 Santa Barbara
19	433 Canon Perdido	29	1330 Chapala
20	210 W Carillo	30	101 Garden

eris. Inc. rip Generation Worksheet - With In/Out Splits 535 EAST MONTECITO STREET PROJECT A.M. Peak Hour P.M. Peak Hour Pass-by Land Use Rate Trips Rate Trips In % Trips Out % Trips Rate Trips In % Trips Out % Trips CITY PROJECTS - NON RESIDENTIAL Net change over 1000 Sq-Ft. non Residentia 10 14 11 12 2.900 1.00 22.66 1.550 86% 0 7 3.40 18% 82% 1.00 1.00 1.00 165 115 146 11.520 1.400 0.450 48% 40% 62% 10.92 4.55 0.47 38% 57% 47% 32. 33. 34. High Turnover Restaurant Retail 127.15 46.55 15 3 12 52% 60% 62% 43% 5 6 2 5 Youth Hostel 6 26 5.63 38% 53% 35. 36. 37. 38. N/A* 212 182 74 14 2,353 3,904 1,597 1.00 1.00 1.00 89.95 46.55 46.55 0.810 1.400 1.400 50% 40% 40% 7.49 4.55 4.55 33% 57% 57% Quality Restaurant Retail 50% 18 18 7 67% 60% 43% 10 Retail 60% 43% 39. 40. 41. Warehouse 2.905 1.00 4.96 0.450 100% 60% 0% 0.47 0% 43% 100% 57% Retail N/A* 1.00 90 4.55 0 -2 1 -1 -7 4 Res. Condo 1.00 5.86 0.440 0 17% 0 83% 0.52 67% 0 42. 33% -3,785 7,150 2,200 1.00 1.00 1.00 1.00 46.55 22.66 1.400 1.550 60% 86% 40% 14% 4.55 3.40 4.55 -17 24 10 43% 18% 57% 82% 57% Retail -176 -5 11 -3 10 -10 20 Office 162 102 Retail 46.55 1.400 60% 40% 43% Garage N/A* N/A* 0 -2,009 1.00 N/A 0 0 0 0 Light Industrial Res. Condo Retail -1,998 -14 -2 4 4 46. 1.00 6.97 0.920 100% 0% 0.98 -2 4 0% 0 100% -2 -2 1 3 11 -1 3 1 0 3 1 2 1.00 1.00 1.00 5.86 46.55 22.66 47 140 185 0.440 1.400 1.550 83% 40% 14% 0.52 4.55 3.40 17% 60% 67% 43% 33% 57% 3,016 14 28 13 -1 4 Office 8.159 86% 18% 82% 23 48. Light Industrial -1.150 1.00 6.97 0 920 100% 0% 0 0.98 0% 0 100% -1 7 1.00 14% 40% 3.40 4.55 2,564 22.66 46.55 58 49 1.550 86% 18% 82% Office Retail 1,049 1.400 60% 0 0 2 2 5 -1 12 12 43% 57% Res. Condo Retail Retail 1.00 1.00 1.00 5.86 46.55 46.55 17% 60% 60% 0.52 4.55 4.55 67% 43% 43% 33% 57% 57% -6 123 50. 0.440 83% 0 7 7 0 4 4 0 2 2 2,653 2,717 1.400 1.400 40% 40% 126 52. N/A* N/A* 0% 100% 14% WATS 2 N/A N/A 0 N/A -10 0% 0% 1.00 55 9.57 0.750 0% 1.01 100% House -1 2 0 0 1.00 1.00 1.00 10.204 112 11 14 29 2 1 Office 11.01 1.550 16 1 86% 3.43 35 18% 82% Light Industrial Light Industrial N/A* 56 57 1,550 1,171 6.97 6.97 0.920 0.920 100% 100% 0% 0% 0.98 0.98 0% 0% 100% 100% 58 59 Retail 1,187 1.00 46.55 55 1.400 2 60% 40% 1 4.55 5 43% 2 57% 3 N/A* Res. Condo 60 61 0.440 17% 83% 67% -1 5 1.00 -6 41 0 0.52 33% 0 5.86 Bed & Breakfast 1.00 8.17 0.560 3 61% 2 39% 0.59 3 53% 2 47% 62 N/A* 1,967 1,400 40% 14% 1.400 64 Office 1.00 22.66 1.550 3.40 32 715 2 21 86% 2 13 0 20 7 18% 82% 26 -13 17 65 Retail 15.838 1.00 45.16 1.350 60% 40% 3.76 60 43% 57% 34 -7 -205 446 58 -20 35 7 Spearmint Rhino? Hotel -4,400 50 1.00 46.55 8.92 0 34 7 0% 59% 0% 41% 4.55 0.70 66% 48% 34% 52% 66 14 0.670 18 7 67 SB Zoo 30 24 167 3,279 1,081 23,981 Church Office 1.00 9.11 0.720 50% 40% 0.66 50% 50% 14% 0% 15% 1.00 22.66 6.97 2.970 3 22 3 22 3.40 0.98 82% 100% 18% 70 71 Light Industrial 0.920 100% 0 0% 24 Manufacturing Quality Restaurant 5.704 1.00 3.82 22 0.730 75% 3 0.74 50% 50% 48% 40% 41% 33 124 105 72 73 74 4,362 42,500 1.00 89.95 392 1,856 0.810 52% 60% 7.49 2.91 67% 43% 22 33% 57% 43.67 33 60 23 41 53 50 1.338 101 Hotel 150 1.00 8.92 0.670 59% 0.70 48% 52% 55 -11 900 75 Retail 1 00 43 67 -520 1.310 -16 60% -9 40% 2 91 -35 59 43% -15 11 57% -20 Project Total: 410

69.

70. 71. 72.

73. 74. 75 631 Olive

117 N Quarantina 620 Quinientos 628 State

211 E Yanonali 433 E. Cabrillo 101 E. Victoria

rojects	List:	43.	335 E Gutierrez	56.	520 E Yanonali
31.	1101 Anacapa	44.	201 E Haley	57.	716 E Yanonali
32.	625 Chapala	45.	632 E Haley	58.	1221 Anacapa
33.	202 E Haley	46.	803 N Milpas	59.	301 W Cabrillo
34.	12 E Montecito	47.	403 E Montecito	60.	632 E Canon Perdido
35.	1214 State	48.	336 N Nopal	61.	618 Castillo
36.	801 State	49.	308 Palm	62.	614 E Haley
37.	26 W Anapamu	50.	406 N Quarantina	63.	709 E Haley
38.	824 Cacique	51.	408 N Quarantina	64.	520 Laguna
39.	130 N Calle Cesar Chavez	52.	217 State	65.	711 N Milpas
40.	1221 Chapala	53.	29 State	66.	22 E Montecito
41.	8 E Figueroa	54.	35 State	67.	500 Ninos
42.	518 Garden	55.	130 E Victoria	68.	221 N Nopal

Ρ

APPENDIX D TRAFFIC SIGNAL WARRANT WORKSHEETS

	.	.	
Page 1-1			
Tue Peb 12, 2008 15:19:13	Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	Scenario Report Existing AM	Existing AM Existing AM Default Geometry Default Impact Fee Default Trip Generation Default Prip Distribution Default Path Default Route Default Configuration
Existing AM		Scenario:	Command: Volume: Geometry: Impact Fee: Trip Generation: Paths: Routes: Configuration:

Existing AM	Existing AM Tue Feb 12, 2008 15:19:13 Page 2-1	5:19:13	Fage 2-1
	Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	Hour rbara estudy	
., 	Signal Warrant Summary Report	ry Report	
Intersection	Ř	Base Met	Future Met
	id]	Del / Vol]	[Del / Vol]
# 5 Gutierrez St and Olive St		No / No	No / No

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Existing AM	Tue Feb 12, 2008 15:19:13	Page 3-1
	Existing AM Peek Hour City of Santa Barbara Montecito Condos Restudy	
	Peak	*********
Intersection #5 ++*++++++++++** Base Volume Alte	Gutierrez St and Oli ************************************	* * * * * * * * * * * * * * * * * * * *
Approach:	North Bound South Bound East Bound - T - R L - T - R L - T - R	West Bound L - T - R
Control: Lanes: Initial Vol: 2	Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Stop Sign Sign Sign Sign Sign Sign Sign Sign	Uncontrolled 0 1 0 1 0 14 547 20
procedulorthb procedulorthb gnal Warrant FAIL - Vehic gnal Warrant gnal Warrant succeed - To	Approach [northbound] [lanes=1] [control=5top Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FALL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=51] FALL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=845] SUCCEED - Total volume graater than or equal to 650 for intersection with less than four approaches.	section
proach(south) gnal Warrant FAIL - Vehic gnal Warrant SUCCEED - Ap succeed - Fo	Approach[southbound][lanes-1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours-0.9] FALL - Vehicle-hours less than 4 for one lane approach. FALL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=213] SUCCEED - Approach volume greater than or equal to 100 for one lane approach Signal Warrant Rule #3: [approach count-3][total volume=845] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	e lane approach. section

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Existing AM	Tue Feb 12, 2008 15:19:14	Page 3-2
	Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	
Peak Hour Volume Signal W	Peak Hour Volume Signal Marrant Report [Urban] ***********************************	1
Base Volume Alternative	t NOT Met	* * * * * * * * * * * * * * * * * * * *
Approach: North Bound Movement: L - T - R	Sound South Bound East Bound W	West Bound
Control: Stop Sign Lanes: 0 1 0 0 Initial Vol: 29 22	ign Stop Sign Uncontrolled 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 14 547 20
Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold:	581 213 Threshold: 472	
SIGNL WARRANT DISCLAIMER This peak hour signal war. "Indicator" of the likelil a traffic signal in the fi are probably more likely signal warrant (such as the	SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting at traffic signal in the fluture. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	ely as an arranting warrant e based

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing AM	Tue Feb 12, 2008 15:19:14	Page 3-3
	Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	
Peak Hour Delay Sign. Intersection #5 Gutierrez St and Olive St	Peak Hour Delay Signal Warrant Report Intersection #5 Gutierrez St and Olive St	
Future Volume Alternati	Future Volume Alternative: Peak Hour Warrant NOT Met	
Approach: North Bound	South Bour	
Control: Stop Sign Lanes: 0 1 0 0 Initial Vol: 29 22 ApproachDel: 14.8	Stop 8 0 0 0 0 0 0 0 0 0	ed Uncontrolled 0 0 1 0 1 0 0 14 547 20
Approach (northbound) [lanes-1] [control-Stop & Signal Warrant Rule #1: [vehicle-hours-0.2] FFL - Vehicle-hours less than 4 for one Signal Warrant Rule #2: [approach volume-5]] FAL - Approach volume less than 100 for signal Warrant Rule #3: [approach counte-3] [rather than 100 for Sugnal Warrant Rule #3: [approach count-3] [rather than or set with less than four approaches	Approach inorthbound[lanes=1][control=5top 51gn] Signal Marrant Rule #1: [vehicle-hours=0.2] SRAL - Vehicle-hours less than 4 for one lane approach. SRAL - Approach volume less than 100 for one lane approach. Signal Marrant Rule #2: [approach volume=51] FAIL - Approach volume less than 100 for one lane approach. Signal Marrant Rule #3: [approach count=3][total volume=845] SUCCED - Total volume greater than or equal to 650 for intersection with less than four approaches.	ch. intersection
Approach[southbound][Lanes=1][control=Stop Signal Warrant Rule #1: [vebicte-hours=0.9] FALL - Vebicle-hours less than 4 for one 1 signal Warrant Rule #2: [approach volume=213] SUCCEED - Approach Volume greater than or Signal Warrant Rule #3: [approach count=3][to glocceto - Total volume greater than or edges with less than four approaches.	Approach[southbound][lanes-1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.9] FLIL - Vehicle-hours less than 4 for one lane approach. Signal Marrant Rule #2: [approach volume=213] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Marrant Rule #3: [approach count=3][total volume=845] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	or one lane approach. Intersection

SIGNAL WARRANT DISCLAINER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Existing AM Tue Feb 12, 2008 15:19:14	Page 3-4
Existing AM Peak Hour City of Santa Barbara Montecito Condos Restudy	
Peak Hour Volume Signal Warrant Report [Urban]	
Intersection #5 Gutierres St and Olive St	*****
lternat	-
Approach: North Bound South Bound East Bound Movement: L - T - R L - T - R L	West Bound
Control: Stop Sign Stop Sign Uncontrolled Lanes: 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 1 0 1 0 14 547 20
Major Street Volume: 591 Minor Approach Volume: 213 Minor Approach Volume Threshold: 472	
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	as an anting rrant ased

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		1) nn)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Existing PM Peak Hour City of Santa Barbara Montecito Condos Restudy	
Scenario:	Scenario Report Existing PM	
Command:	Existing PM	
Volume:	Existing PM	
Geometry:	Default Geometry	
Impact Fee:	Default Impact Fee	
Trip Generation:	Default Trip Generation	
Trip Distribution:	Default Trip Distribution	
Paths:	Default Path	
Routes:	Default Route	
Configuration:	Default Configuration	

Page 2-1

Future Met [Del / Vol] No / No

5 Gutierrez St and Olive St

Intersection

Existing PM

Tue Feb 12, 2008 15:20:17

Existing FM Feak Hour
City of Santa Barbara
Montecito Condos Restudy
Signal Warrant Summary Report
Base Met
[Pel / No]

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Existing PM	Tue Feb 12, 2008 15:20:17	:20:17	Page 3-1
	Existing PM Peak Hour City of Santa Barbara Montecito Condos Restudy	four para study	
Peak Hour Delay Signal Warrant Report	Peak Hour Delay Signal Warrant Report	rant Report	************
Intersection #5 Gutierrez St and Olive St	St and Olive St	******	*****
Base Volume Alternative: Peak Hour Warrant NOT Met	eak Hour Warrant NOT	-	
Approach: North Bound Movement: L T - R	d South Bound R L - T - R	East Bound	West Bound L - T - R
Control: Stop Sign Lanes: 0 1 0 0 Initial Vol: 84 27 ApproachDel: 20.0	Stop Sign 0 0 0 1 0 0 0 67 172	Uncontrolled 0 0 0 0 0 0 xxxxxx	Uncontrolled 0 1 0 1 0 12 689 42 xxxxxx
Approach[rorthbound][lanes=1] [control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.6] FPAIL - Vehicle-hours less than # for one lane approach. FPAIL - Vehicle-hours less than # for one lane approach. Signal Warrant Rule #2: [approach volume=111] SUCCEED - Approach volume greater than or equal to 100 for one lane Signal Warrant Rule #3: [approach count=3][cotal volume=1093] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	t Rule #1: [vehicle-hours-0.6] t Rule #1: [vehicle-hours-0.6] icle-hours less than # for one lax t Rule #2: [approach volume=111] Approach volume greater than or ec t Rule #3: [approach connt-3][tota Total volume greater than or equal Total volume greater than or equal Total volume greater than or equal	approach. al to 100 for volume=1093] to 650 for int	one lane approach.
Approach[southbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=1.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=239] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1093] SUCCEED - Total volume greater than or equal to 650 for intersection	=1[Control=Stop Sign ehicle-hours=1.1] ss than 4 for one lar pproach volume=239] me greater than or ep pproach count=3][tota greater than or equal	ne approach. e approach. qual to 100 for or l volume=1093] t to 650 for inter	e lane approach.

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban] Intersection #5 Gutierrez St and Olive St 0 1 0 1 0 12 689 42 Uncontrolled West Bound Page 3-2 This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants). Uncontrolled 0 0 0 0 0 0 0 East Bound City of Santa Barbara Montecito Condos Restudy Base Volume Alternative: Peak Hour Warrant NOT Met Existing PM Peak Hour Stop Sign 0 0 0 1 0 0 67 172 South Bound Major Street Volume: 743 Minor Approach Volume: 239 Minor Approach Volume Threshold: 387 Stop Sign 0 1 0 0 0 84 27 0 North Bound SIGNAL WARRANT DISCLAIMER Initial Vol: Existing PM Approach: Control:

Tue Feb 12, 2008 15:20:17

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Existing PM	T	Tue Feb 12, 2008 15:20:17	:20:17	Page 3-3
	MC	Existing PM Peak Hour City of Santa Barbara Montecito Condos Restudy	Hour bara study	
Intersection	Peak Hour Delay Sign	Peak Hour Delay Signal Warrant Report	Peak Hour Delay Signal Warrant Report	
Future Volume	Alternative: Pe	Future Volume Alternative: Peak Hour Warrant NOT Met	OT Met	-
Approach: Movement:	North Bound L - T - R	d South Bound	East Bound Wes	West Bound L - T - R
Control: Lanes: Initial Vol: ApproachDel:	Stop Sign 0 1 0 0 0 84 27 0	Stop Sign 0 0 0 1 0 0 67 172 17.0	Uncontrolled Uncont	Uncontrolled 0 1 0 1 0 12 689 42
Approach[norm] Signal Warrant FAIL - Veh: Signal Warrant Succeed - 1 Signal Warrant Succeed - 2 Succeed - 1	Approach inorthbound Lanss=1 Control=Stop Signal Warrant Rule #1: [vehicle-hours=0.6] FAIL - Vehicle-hours less than 4 for one Signal Warrant Rule #2: [approach volume=11 SUCCED - Approach volume greater than 5 SUCCED - Approach volume greater than 7 STOP SIGNAL Warrant Rule #3: [approach count=3] with less than four approacher	Approach (northbound) Lanes-1] (control-Stop Sign) Signal Warrant Rule #1: [vehicle-hours=0.6] FALL - Vehicle-hours less than 4 for one lane approach. Signal Marrant Rule #2: [approach volume-11] SUCCEED - Approach volume greater than or equal to 100 for Signal Marrant Rule #3: [approach count=3][total volume-1093] SUCCEED - Total volume greater than or equal to 50 for in with less than four approaches.	roach[northbound][lanes=1][control=5top Sign] nal Marrant Rule #1: [vehicle-hours=0.6] FNII - Vehicle-hours less than 4 for one lane approach. SUCCEED - Approach volume greater than or equal to 100 for one lane approach nal Marrant Rule #3: [approach count=3][total volume=1093] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	ne lane approach.
Approach[south	bound][lanes=1]	Approach[southbound][lanes=1][control=Stop Sign]	lu	

SIGNAL WARRANT DISCLAIMER
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Existing FM Peak Hour City of Santa Marbara
Montecito Condos Restudy
Peak Hour Volume Signal Warrant Report [Urban]
Intersection #5 Gutierrez St and Olive St
Future Volume Alternative: Peak Hour Warrant NOT Met
Approach: Worth Bound South Bound South Bound West Bound Movement: L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Lanes: 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
Major Street Volume: Minor Approach Volume: 239 Minor Approach Volume Threshold: 387
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Page 3-4

Tue Feb 12, 2008 15:20:17

Existing PM

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing With Project AM	sting With Project AM Tue Feb 12, 2008 15:20:31 Page 1-1	Page 1-1
Scenario:	Scenario Report Existing With Project AM	
Command:	Existing With Project AM	
Volume:	Existing With Project AM	
Geometry:	Default Geometry	
Impact Fee:	Default Impact Fee	
Trip Generation:	Default Trip Generation	
Prip Distribution:	Default Trip Distribution	
Paths:	Default Path	
Routes:	Default Route	
Configurations	Default Configuration	

Page 2-1

Future Met [Del / Vol]

Signal Warrant Summary Report
Base Met
[Del / Vol]
No / No

5 Gutierrez St and Olive St

Intersection

Existing With Project AM Tue Feb 12, 2008 15:20:31

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LOS ANGELES,
LOS
MMA,
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Page 3-1

Peak Hour Delay Signal Warrant Report  Intersection #5 Guterrez Z. A and Olive St.	Base Volume Alternative: Peak Hour Warrant NOT Met	North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R L - T - R	Stop Sign   Stop Sign   Uncontrolled   Uncontrolled   0 1 0 0 0 0 1 0 1 0 0 0 1; 33 24 0 0 98 116 0 0 0 14 555 20 1; 15.1   15.7   xxxxxx   xxxxxxx	Approach (northbound) [lanes=1] [control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FALL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=57] FALL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3] [total volume=860] Signal Warrant Rule #3: [approach count=3] [total volume=86] WicceED - Total volume greater than or equal to 650 for intersection with less than four approaches.	Approach [southbound] [lanes-1] [control=Stop Sign] Signal Marrant Rule #1: [vahicle-hours-0.9] FALL - Vehicle-hours less than 4 for one lane approach. Signal Marrant Rule #2: [approach volume-214] SIGCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Marrant Rule #3: [approach count-3][total volume-860] SIGCEED - Total volume greater than or equal to 500 for intersection with less than four approaches.
**************************************	Base Volume Alterna	Approach: Nort		Approach (northbound Signal Warrant Rule FAIL - Vehicle-h Signal Warrant Rule FAIL - Approach Signal Warrant Rule Signal Warrant Rule SUCCEED - Total	Approach (southbound Signal Warrant Rule FAIL - Vehicle-b Signal Warrant Rule SUCCEED - Approa Signal Warrant Rule SUCCEED - Approa SUCCEED - Total

SIGNAL WARRANT DISCLAIMER

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Page 3-2

Peak Hour Volume Signal Warrant Report (Urban) Intersection #5 Gutierrez St and Olive St |-----R L T R West Bound Base Volume Alternative: Peak Hour Warrant NOT Met 589 Major Street Volume: 589 Minor Approach Volume: 214 Minor Approach Volume Threshold: 467 Initial Vol: Control:

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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* * * * * * * * * * * * * * * * * * * *	_	West Bound L - T - R	Uncontrolled 0 1 0 1 0 14 555 20 xxxxxxx	section
Peak Hour Delay Signal Warrant Report Intersection #5 Gutierrez St and Olive St	Future Volume Alternative: Peak Hour Warrant NOT Met	rth Bound South Bound East Bound - T - R L - T - R L - T - R	Sign Uncontrolled 0 1 0 0 0 0 0 98 116 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Approach Inorthbound [lanes=1][cottrol=5top Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FAIL - Vehicle-hours less than 4 for one lane approach. FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #2: [approach volume=5?] FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=660] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach(southbound)[lanes=1][control=Stop Sign]
Signal Warrant Rule #1: (vbfiol=hours=0.9]
FAIL - Vehicle-hours less than 4 for one lane approach.
SignAll Warrant Rule #2: [approach volume=214]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #73; [approach count-3][total volume=860]
SUCCEED - Total volume greater than or equal to \$50 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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#### Tue Feb 12, 2008 15:20:31 Existing With Project AM

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*****	Peak Hour Vol	Peak Hour Volume Signal Warrant Report [Urban]	t Report [Urban]	Peak Hour Volume Signal Warrant Report [Urban]
Intersection	Intersection #5 Gutierrez St and Olive St	and Olive St	****	Intersection #5 Gutierrez St and Olive St
Future Volume	Alternative: Pe	Future Volume Alternative: Peak Hour Warrant NOT Met	OT Met	-
Approach: Movement:	North Bound Sou	South Bound	μ. Η	West Bound
Control: Lanes: Initial Vol:	top S 1 0 24	Stop Sign 0 0 0 1 0 0 98 116	Uncontrolled 0 0 0 0 0	Uncontrolled 0 1 0 1 0 14 555 20
Major Street Volume: Minor Approach Volume: Minor Approach Volume	Major Street Volume: 589 Minor Approach Volume: 214 Minor Approach Volume Threshold: 467	589 214 1d: 467		

SIGNAL WARRANT DISCLAIMER

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ue Feb 12, 2008 15:20:44	
Existing With Project PM Tue Feb 12, 2008 15:20:44	

Scenario Report Existing With Project PM	Existing With Project PM Existing With Project PM	Default Geometry	Default Impact Fee	Default Trip Generation	Default Trip Distribution	Default Path	Default Route	Default Configuration
Scenario:	Command: Volume:	Geometry:	Impact Fee:	Trip Generation:	Trip Distribution:	Paths:	Routes:	Configuration:

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Future Met [Del / Vol]	NO / NO				
Signal Warrant Summary Report  Base Wet  [Del / Vol]  [Del / Vol]	No / No				
tersecti	# 5 Gutierrez St and Olive St				

Tue Feb 12, 2008 15:20:44 Existing With Project PM

Page 3-1

Peak Hour Delay Signal Warrant Report	Intersection #5 Gutierrez St and Olive St		orth Bound South Bound E	Stop Sign Stop Sign 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Approach (northbound) [lanes-1] [control-Stop Sign] Signal Markant Rule #1: [vehicle-hours-6.6] Signal Markant Rule #2: [approach volume-1] Signal Markant Rule #2: [approach volume-1] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Markant Rule #3: [approach count-3] [total volume-1] succeed - Total volume greater than or equal to 650 for intersection with less than four approaches.
Peak	Intersection #5 Gutierrez	Base Volume Alternative: E		Control: Stop Sign Lanes: 0 1 0 0 Initial Vol: 86 28 ApproachDel: 20.1	Approach (northbound) llanes Approach (northbound) llanes FAIL - Vehicle-hours 1e FAIL - Vehicle-hours 1e Signal Warrant Rule #2: [6 SUCCEED - Approach voll Signal Warrant Rule #3: [6 SUCCEED - Total volume with less tha

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [Vehicle-hours=1.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=245]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1085]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

### SIGNAL WARRANT DISCLAIMER

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Page 3-2

Peak Hour Volume Signal Warrant Report [Urban] Intersection #5 Gutierrez St and Olive St Base Volume Alternative: Peak Hour Warrant NOT Met North Bound Approach: Movement:

Major Street Volume: 726 Minor Approach Volume: 245 Minor Approach Volume Threshold: 395

SIGNAL WARRANT DISCLAIMER

This peak hour signal werrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Existing With Project PM Tue Feb 12, 2008 15:20:44

Uncontrolled 0 1 0 1 0 0 1 0 42 0 12 672 42 Peak Hour Delay Signal Warrant Report Intersection #5 Gutierrez St and Olive St Control:

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrah Rule #1: [vehicle-hours=0.6]
FAIL - Vehicle-hours less than 4 for one lane approach.
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrah Rule #2: [approach volume=114]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrah Rule #3: [approach count=3][total volume=1085]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Ralle #1: [vehicla-hours=1.2]
FAIL - Vehicla-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=245]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1085]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Tue Feb 12, 2008 15:20:44 Existing With Project PM Peak Hour Volume Signal Warrant Report [Urban] Intersection #5 Gutierrez St and Olive St Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Uncontrolled Uncontrolled Uncontrolled Uncontrolled Uncontrolled Unitial Vol: 86 28 0 0 73 172 0 0 0 12 672 42

Major Street Volume: 726 Minor Approach Volume: 245 Minor Approach Volume Threshold: 395

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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ı	r	
Page 1-1		
uture Base AM The Feb 12, 2008 15:20:58 Page 1-1	Scenario: Future Base AM	Future Base AM  Future Base AM  Default Geometry  Default Trip Generation  Default Trip Distribution  Default Path  Default Reth  Default Reth  Default Route  Default Configuration
Future Base AM	Scenario:	Command: Volume: Volume: Geometry: Impact Fee: Trip Generation: Frip Distribution: Paths: Routes: Configuration:

Tue Feb 12, 2008 15:20:58 Page 2-1

Future Base AM

Signal Warrant Summary Report
Base Met
[Del / Vol]
ive St No / No

# 5 Gutierrez St and Olive St

Intersection

Future Met [Del / Vol] No / No

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Future Base AM Tue Feb 12, 2008 15:20:58	Page 3-1
Peak Hour Delay Signal Warrant Report	
Intersection #5 Gutierrez St and Olive St	******
Base Volume Alternative: Peak Hour Warrant NOT Met	
Approach: North Bound South Bound East Bound Movement: L - T - R L - T - R	West Bound L - T - R
Control: Stop Sign Stop Sign Uncontrolled Lames: 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 14 555 20
Approach[northbound][lanes1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FAIL - Vehicle-hours 1-0.2] FAIL - Approach volume #2: [approach volume=51] FAIL - Approach volume less than 100 for one lane approach, signal Warrant Rule #3: [approach count=3][cotal volume=856] SUCCEED - Total volume #2 eacher than or equal to 650 for intersection with less than four approaches.	section
Approach[southbound][lanes=1][control=Stop Sign] Signal Warrant Rule H: [vehicle-houts=0.9] FAIL - Vehicle-houts less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=216] SUCCEDD - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=856] SUCCEDD - Total volume greater than or equal to 650 for intersection With less than four approaches.	e lane approach.

SIGNAL WARRANT DISCLAIMER
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Future Base AM Tue Feb 12, 2008 15:20;58	5;20;58 Page 3-2
**************************************	int Report [Urban]
Intersection #5 Gutierrez St and Olive St	*********************************
Base Volume Alternative: Peak Hour Warrant NOT Met	JT Met
Approach: North Bound South Bound Ba	East Bound West Bound  L T R L T
Control: Stop Sign Stop Sign Lanes: 0 1 0 0 0 0 0 1 0 10 11titial Vol: 29 22 0 0 98 118	Uncontrolled Uncontrolled 0 0 0 0 1 0 1 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 14 555 2
Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold: 467	
SIGNAL WARRANT DISCLAINER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	ibe considered solely as an zed intersection warranting is that exceed this warrant of the other volume based warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrante nalysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Tue Feb 12, 2008 15:20:58	
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port	**************************************	East Bound West Bound	Uncontrolled Uncontrolled 0 0 0 0 0 1 0 1 0 0 0 0 0 14 555 20 xxxxxx xxxxxx	ach. pproach. e=8561 for intersection	nach. 100 for one lane approach. me=856] for intersection
Peak Hour Delay Signal Warrant Report	Intersection #5 Gutierrez St and Olive St	Approach: North Bound South Bound East Movement: L - T - R L - T - R L	Control: Stop Sign Stop Sign Uncontr Lanes: 0 1 0 0 0 0 1 0 0 0 0 Initial Vol: 29 22 0 0 98 118 0 0 ApproachDel: 15.0 15.7 xxxxxx	Approach[northbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FALL - Vehicle-hours less than # for one lane approach. FALL - Approach volume=51] FALL - Approach volume=51 FALL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=856] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	Approach(southbound)[lanes=1][control=Stop Sign] Signal Warrant Rule #1: {vehicle-hours=0.9} FRIL - Vehicle-hours less than 4 for one lane approach. FRIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: {approach volume=216} SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: {approach count=3}[cotal volume=956] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

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Future Base AM Tue	Tue Feb 12, 2008 15:20:58	20:58	Page 3-4
Peak Hour Volume Signal Warrant Report [Urban]	Peak Hour Volume Signal Warrant Report [Urban]	Report [Urban]	
Intersection #5 Gutierrez St and Olive St	nd Olive St	***************************************	*****
Future Volume Alternative: Peak Hour Warrant NOT Met	k Hour Warrant NO	-	-
Approach: North Bound South Bound Movement: L - T - R L - T - T -	South Bound I T R	East Bound	West Bound  L - T - R
Control: Stop Sign Lanes: 0 1 0 0 0 Initial Vol: 29 22 0	Stop Sign 0 0 0 1 0 0 98 118	Uncontrolled 0 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 14 555 20
Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold:	589 216 d: 467		
SIGNAL WARRANT DISCLAINER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	analysis should b of an unsignalize Intersections et one or more of hour or 8-hour wa	be considered sole intersection was that exceed this the other volume irrants).	ly as an rranting warrant based

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Page 1-1		
Future Base PM Tue Feb 12, 2008 15:21:11 Page 1-1	Scenario: Future Base PM	Future Base PM Future Base PM Default Geometry Default Impact Fee Default Trip Generation Default Path Distribution Default Route Default Route
i !	Putn	Fut Doe Doe Doe E
Future Base PM	Scenario:	Command: Volume: Geometry: Impact Fee: Trip Generation: Prip Distribution: Paths: Configuration:

Page 2-1		Future Met	[Del / Vol]	No / No
Tue Feb 12, 2008 15:21:11	Signal Warrant Summary Report	Base Met	[Del / Vol]	No / No
Tue F	Signal			5 Gutierrez St and Olive St
Future Base PM		Intersection		# 5 Gutierrez

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**********	Peak Hour	Peak Hour Delay Signal Warrant Report	Peak Hour Delay Signal Warrant Report	*******
Intersection #5 Gutierrez St and Olive St	tierrez St a	nd Olive St	Intersection #5 Gutierrez St and Olive St	*****
se Volume Alter	lative: Peak	Base Volume Alternative: Peak Hour Warrant NOT Met	Met	_
1	North Bound	South Bound	East Bound L - T - R	West Bound L - T - R
Control: S Lanes: 0 Initial Vol: 85 ApproachDel:	Stop Sign Sto 0 1 0 0 0 0 85 27 0 0	68 68 7.4	Uncontrolled 0 0 0 0 0 xxxxxx	Uncontrolled 0 1 0 1 0 12 699 43
Approach [northbound] [lanes=1] [control=Stop Signal Warrant Rule #1: [vehicle-hours=0.6] FALL - Vehicle-hours [ses than 4 for one 1 Signal Warrant Rule #2: [approach volume=115] SUCCEDD - Approach volume greater than or Signal Warrant Rule #3: [approach count=3] [to SUCCEED - Total volume greater than or with less than four approaches.	d][lanes=1][le #1: [vehic.hours less t][e #2: [appro.ach volume great #3: [appro.less than follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows that follows the follows that follows that follows the follows that follows the follows that follows the follows that follows the follows that follows the follows that follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows the follows	Approach[northbound][lanes=][ Control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.6] FALL -Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=112] SUCCEED - Approach volume greater than or equal to 100 for Signal Warrant Rule #3: [approach count=3][total volume=1109] SUCCEED - Total volume greater than or equal to 650 for in with less than four approaches.	roach[northbound][lanes=1][control=Stop Sign] nal Warrant Rube #1: [vehicle-hours=0.6] RAIL - Vehicle-hours less than # for one lane approach. nal Warrant Rube #2: [approach volume=112] SUCCEED - Approach volume greater than or equal to 100 for one lane approach nal Warrant Rube #3: [approach count=3][total volume=1109] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	ne lane approach
Approach (southbound) [lanes=1] (control=Stop Si Signal Warrant Rule #1: [vehicle-hours=1.2] FALL - Vehicle-hours less than 4 for one 1 Signal Warrant Rule #2: [approach volume=243] SUCCEED - Approach volume greater than or Signal Warrant Rule #3: [approach count=3] [to SUCCEED - Total volume greater than or equ succEED - Total volume greater than or equ with less than four approaches.	d [lanes=1][le #1: [vehic hours less tie #2: [appro. ach volume green less than for	Approach (southbound) [Lanes=1] [control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=1.2] Signal Warrant Rule #2: [approach volume=243] SUCCEED - Approach volume greater than or equal to 100 Signal Warrant Rule #3: [approach count=3] [cotal volume=143] SUCCEED - Fotal volume greater than or equal to 650 for with less than four approaches.	Approach (southbound) [lanes-1] (control=5top Sign] Signal Warrant Rule #1: [vehicle-hours=1.2] SIGNAL Warrant Rule #2: [approach volume=243] SUCCEED - Approach volume greater than or equal to 100 for one lane approach Signal Warrant Rule #3: [approach count=3][total volume=1109] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.	nne lane approach

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Future Base PM Tue Feb 12, 2008 15:21:11	12, 2008 15:21:11 Page 3-2
Peak Hour Volume Signal Warrant Report [Urban]	Peak Hour Volume Signal Warrant Report [Urban]
Intersection #5 Gutierrez St and Olive St	Intersection #5 Gutierrez St and Olive St
Base Volume Alternative: Peak Hour Warrant NOT Met	Ξ
Approach: North Bound South Bound Movement: L - T - R L - T - R	h Bound
Control: Stop Sign Stop Sign Lanes: 0 1 0 0 0 0 0 1 0 1 0 1 1 1 1 1 1 1 1	₽.∺
Major Street Volume: 754 Minor Approach Volume: 243 Minor Approach Volume Threshold: 382	400
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	sis should be considered solely as an unsignalized intersection warranting tersections that exceed this warrant e or more of the other volume based or element of the table.

Intersection #5 Gutierrez St and Olive St Future Volume Alternative: Peak Hour Warrant NOT Met  Approvach: North Bound South Bound West Bound West Bound
Intersection #5 Gutierrez St and Olive St
lume Alternative: Peak Hour Warrant NOT
North Bound South Bound
L-T-R L-T-R L-T-R L
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Uncontrolled Uncontrolled Uncontrolled Uncontrolled Initial Vol. 85 27 0 0 68 175 0 0 0 12 699 43 ApproachDel: 20,5 17.4 xxxxxx xxxxxx
Approach[northbound][Lanes-1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.6] Fignal Warrant Rule #2: [approach wolume=112] SUCCED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1109] SUCCED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant volume greater than or equal to 650 for intersection with less than four approaches equal to 650 for intersection
Approach(southbound)[Lames=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=1.2] FAIL - Vehicle-hours = 1.2] FAIL - Vehicle-hours = 1.2 Signal Warrant Rule #2: [approach volume=243] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1109] SUCCEED - Total volume greater than or equal to 650 for intersection With less than four approaches.

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

SIGNAL WARRAWT DISCLALMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Future Base PM	Tue Feb 12, 2008 15:21:11	1:11	Page 3-4
Peak Hour Volume Signal Warrant Report (Urban)	Peak Hour Volume Signal Warrant Report [Urban]	Report [Urban]	
Intersection #5 Gutierrez St and Olive St	St and Olive St	***************************************	*****
Future Volume Alternative: Peak Hour Warrant NOT Met	Peak Hour Warrant NOT		-
Approach: North Bound South Movement: L - T - R L -	South Bound R L - T - R I	East Bound	i ři
Control: Stop Sign Lanes: 0 1 0 0 0 Initial Vol: 85 27	Stop Sign 0 0 0 0 175 0 0 0 0 68 175 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 12 699 43
Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold:	754 243 shold: 382		
SIGNAL WARRANT DISCLAINER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	ant analysis should be cod of an unsignalized ture. Intersections the connect one or more of the ed-hour or 8-hour warn	considered sole intersection was hat exceed this w the other volume rants).	ly as an rranting warrant based

Future With Project	12, 2008 15:21:23	Fage ⊥-1
Scenario:	Scenario Report Future With Project AM	
Command:	Future With Project AM	
Volume:	Future With Project AM	
Geometry:	Default Geometry	
Impact Fee:	Default Impact Fee	
Trip Generation:	Default Trip Generation	
Trip Distribution:	Default Trip Distribution	
Paths:	Default Path	
Routes:	Default Route	
Configuration:	Default Configuration	

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Page 2-1	Future Met [Del / Vol] No / No	
Future With Project AM Tue Feb 12, 2008 15:21:23	Signal Warrant Summary Report Base Met Futi [Del / Vol] [Del / No No No	
roject AM Tue Feb 12	z St and	
Future With Project AM	Intersection # 5 Gutlerrea	

Page 3-1 Tue Feb 12, 2008 15:21:23 Future With Project AM

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R L - R Peak Hour Delay Signal Warrant Report Intersection #5 Gutierrez St and Olive St Base Volume Alternative: Peak Hour Warrant NOT Met 

Approach floarthbound][laness1][control-Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=57]
FAIL - Approach count oone=31[total volume=871]
Signal Warrant Rule #3: [approach count=31][total volume=871]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach[southbound][lanes=1][control=5top Sign]
Signal Warrant Rule #1: [vehicle-hours=1.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=217]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=81]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a raffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Tue Feb 12, 2008 15:21:24 Future With Project AM

Page 3-2

Peak Hour Volume Signal Warrant Report [Urban] Intersection #5 Gutierrez 5t and Olive St Base Volume Alternative: Peak Hour Warrant NOT Met Major Street Volume: 597 Minox Approach Volume: 217 Minor Approach Volume Threshold: 463 Approach: North Bound Movement: L - T - R Initial Vol: Control:

SIGNAL WARRANT DISCLAIMER

This peak hour signal werrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Delay Signal Warrant Report	Intersection #5 dutierrez St and olive St	Future Volume Alternative: Peak Hour Warrant NOT Met	T - R L - T - R L - T - R L - T - R	Stop Sign	Approach northbound][lanes-1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.2] FALL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=57] FALL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count-3][total volume=81] Signal Warrant Rule #00 for one lane approach. with less than four approaches.	Approach[southbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=1.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=2.17] SUGCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=871] SUCCEED - Total volume greater than or equal to 650 for intersection
Peak Hour D	#5 Gutierrez St and	Alternative: Peak	North Bound L - T - R I	Stop Sign 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	thoundillanes-1] [or the #1: [vehicle incle-hours less than the H2: [approach treated would be and the H2: [approach treated with less than four	thound [lanes-1][cc tr Rule #1: [vehicle ijcle-hours less tha tr Rule #2: [approar Approach volume greate tr Rule #3: (approac
	Intersection	Future Volume	Approach: Movement:	Control: Lanes: Initial Vol: ApproachDel:	Approach(nori Signal Warran Signal Warran Signal Warran FAIL - App Signal Warran Success -	Approach[sourside of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of

SIGNAL WARRANT DISCLAIMER
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Future With Project AM Tue Feb 12, 2008 15:21:24	Page 3-4
Peak Hour Volume Signal Warrant Report [Urban]	
Intersection #5 Gutterrez St and Olive St	***********
lternative: Peak Hour Warrant NOT Met	
Approach: North Bound South Bound East Bound Movement: L - T - R L - T - R L	ad West Bound
Control: Stop Sign Stop Sign Uncontrolled U Lanes: 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 14 563 20
Major Street Volume: 597 Minor Approach Volume: 217 Minor Approach Volume Threshold: 463	
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warrantha a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	as an nnting rrant nsed

Future With Project PM Tue Feb 12, 2008 15:21:38 Page 1-1	Scenario: Feture With Project PM	Future With Project PM Puture With Project PM Default Geometry Default Inpact Fee Default Trip Generation Default Trip Distribution Default Route
P. T.	Future	Future Future Defaul Defaul Defaul Defaul Defaul
Future With Project PM	Scenario:	Commend: Volume: Ceometry: Impact Fee: Trip Generation: Paths: Rautes:

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Page 2-1	14.	No / No
Tue Feb 12, 2008 15:21:38	Signal Warrant Summary Report Base Met	No / No
Future With Project PM Tue Feb 12, 2008 15:21:38 Page 2-1	Signal Warrant Summary Report Action Assettion	# 5 Gutierrez St and Olive St
Future	Inters	9 5

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Tue Feb 12, 2008 15:21:38 Future With Project PM Peak Hour Delay Signal Warrant Report Intersection #5 Gutierrez St and Olive St Uncontrolled 0 1 0 1 0 12 702 43 |----||---XXXXXX Uncontrolled 0 0 0 0 0 0 0 0 Signal Warrant Rule #1: [vehicle-hours=0.7]
FALL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=115] XXXXXX Stop Sign Un 0 0 0 1 0 0 0 0 74 175 C 16.0 × Approach[northbound][lanes=1][control=Stop Sign] ------Stop Sign 0 1 0 0 0 87 28 0 21.2 Initial Vol: ApproachDel: Control:

SUCCEED - Approach volume greater than or equal to 100 for one lame approach. Signal Warrant Ralle #3: [approach count=3][total volume=1121] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Approach(southbound)[lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [Vehicle-hours=1.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=249]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1121]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

### SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Future With Project PM Tue Feb 12, 2008 15:21:38	Page 3-2
Peak Hour Volume Signal Warrant Report [Urban]	
**************************************	* * * * * * * * * * * * * * * * * * * *
Base Volume Alternative: Peak Hour Warrant NOT Met	-
Approach: North Bound South Bound West Bound Movement: L - T - R L - T - R L - T - T - R L - T - R L - T - T - R L - T - T - R L - T - T - T - T - T - T - T - T - T -	West Bound
Stop Sign Stop Sign Uncontrolled 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	Uncontrolled 0 1 0 1 0 12 702 43
Major Street Volume: 757 Minor Approach Volume: 249 Winor Approach Volume Threshold: 381	
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (sinh as the 4-hour or 8-hour warrants).	s an cing ant

Page 3-3	
Tue Feb 12, 2008 15:21:38	
Future With Project PM	

Page 3-4

Tue Feb 12, 2008 15:21:38

Future With Project PM

Peak Hour Delay Signal Warrant Report	Intersection #5 Gutierrez St and Olive St	reak BOLL Wallam, NOI Met	South Bound	top Sign Stop Sign Uncontrolled Uncontrolled 1 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	Approach (northbound) [lanes=1] (control=5top Sign] Signal Warrant Rule #1: {vehicle-hours 0.7} FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #3: {approach volume=115} SUCCED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: {approach count=3] [total volume=1121] SUCCED - Total volume greater than or equal to 650 for intersection with less than four approaches. Approach (southbound) [lane=1] [control=5top Sign] Signal Warrant Rule #1: {approach volume=249} SUCCED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: {approach count=3}{total volume=121} SUCCED - Approach volume greater than or equal to 650 for intersection with less than four approach count=3 {total volume=121}  SUCCED - Approach volume greater than or equal to 650 for intersection with less than four approaches.
Peak Hour De	Intersection #5 Gutierrez St and Olive St	Future volume Alternative: Feak H	Approach: North Bound S Movement: L - T - R L	1gn 0 0	Approach Fourthbound   Lanes

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a trafic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

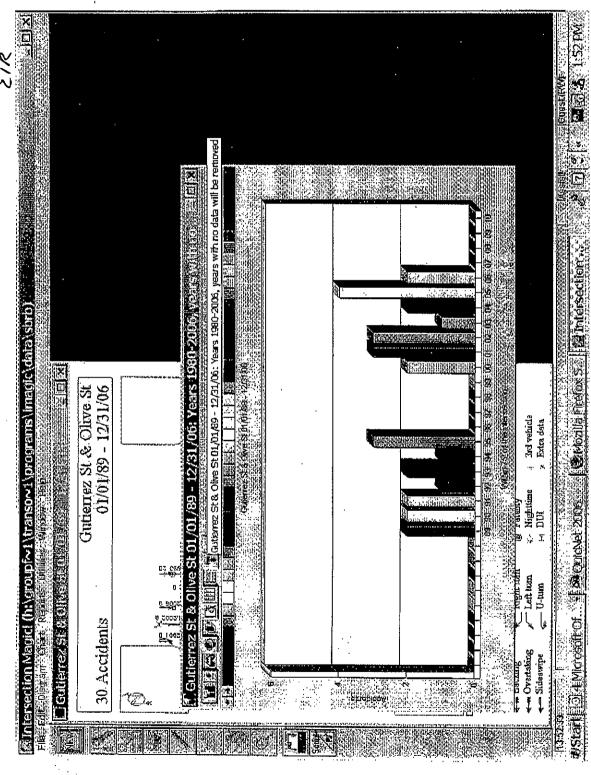
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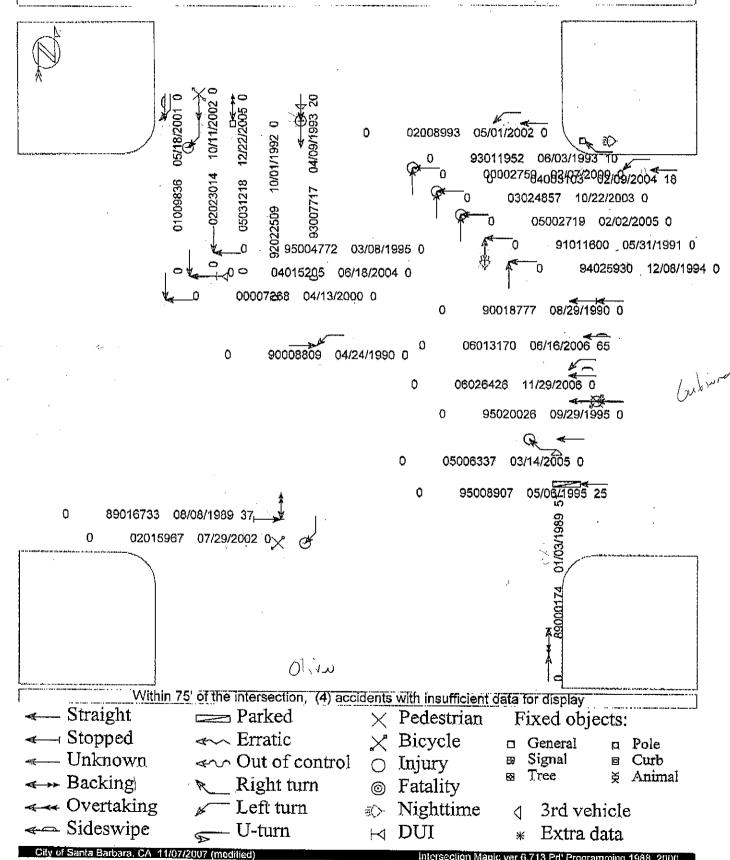
Feak Hour Volume Signal Warrant Report [Urban]	port [Urban]
Intersection #5 Gutierrez St and Olive St	*****
ternative: Peak Hour Warr	=
Approach: North Bound South Bound Ea Movement: L - T - R L - T - R L -	East Bound West Bound  L - T - R L - T - R
Control: Stop Sign Stop Sign Un Lanes: 0 1 0 0 0 0 1 0 0 0 Initial Vol: 87 28 0 0 74 175 0	Uncontrolled Uncontrolled 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 12 702 43
Major Street Volume: 757 Minor Approach Volume: 249 Minor Approach Volume Threshold: 381	
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).	onsidered solely as an theresection warranting t exceed this warrant e other volume based nts).

### APPENDIX E COLLISION DATA



### 30 Accidents

### Gutierrez St & Olive St 01/01/89 - 12/31/06



# APPENDIX F ON-STREET PARKING SURVEY COUNTS

Olive St Bt. Haley & Montecito

Salsipuedes/N. Calle Cesar Chavez Bt. Haley & 101 Overpass

<u>TIME</u>	East Side	West Side
8:00	18	22
9:00	23	28
10:00	25	33
11:00	26	35
12:00	21	39
1:00	21	34
2:00	22	37
3:00	25	39
4:00	20	40
5:00	18	24
6:00	12	13
7:00	13	13
8:00	11	10

TIME	East Side	West Side
8:00	38	33
9:00	48	45
10:00	56	46
11:00	57	49
12:00	52	46
1:00	53	41
2:00	53	45
3:00	58	46
4:00	61	44
5:00	43	28
6:00	31	20
7:00	19	19
8:00	13	15

Quarantina St Bt. Haley & Montecito

Haley St Bt. Olive & Quarantina

TIME	East Side	West Side
8:00	24	19
9:00	24	28
10:00	29	31
11:00	32	35
12:00	23	33
1:00	24	30
2:00	23	30
3:00	24	28
4:00	22	32
5:00	16	18
6:00	11	8
7:00	6	7
8:00	6	6

<u>TIME</u>	North Side	South Side
8:00	6	4
9:00	11	9
10:00	11	12
11:00	14	16
12:00	17	15
1:00	11	12
2:00	15	10
3:00	12	10
4:00	13	20
5:00	9	13
6:00	6	6
7:00	4	6
8:00	3	4

Richardson Ave

Bt. Olive & Salsipuedes/Cesar Chavez

Gutierrez St.

Bt. Olive & Quarantina

<u>TIME</u>	North Side	South Side
8:00	27	16
9:00	29	15
10:00	30	18
11:00	33	23
12:00	33	16
1:00	28	17
2:00	30	17
3:00	32	18
4:00	29	17
5:00	25	12
6:00	20	6
7:00	18	5
8:00	16	3

<u>TIME</u>	North Side	South Side
8:00	5	15
9:00	12	20
10:00	13	26
11:00	16	28
12:00	13	26
1:00	12	25
2:00	13	23
3:00	13	22
4:00	11	21
5:00	16	25
6:00	11	16
7:00	9	11
8:00	7	7

Montecito St

Bt. Olive & Quarantina

TIME	North Side	South Side
8:00	20	24
9:00	20	27
10:00	31	24
11:00	34	28
12:00	27	23
1:00	27	22
2:00	25	21
3:00	24	20
4:00	27	21
5:00	25	17
6:00	24	18
7:00	22	20
8:00	17	16

Olive St Bt. Haley & Montecito

### Salsipuedes/N. Calle Cesar Chavez Bt. Haley & 101 Overpass

<u>TIME</u>	East Side	West Side
8:00	18	25
9:00	20	33
10:00	23	35
11:00	25	40
12:00	28	43
1:00	24	35
2:00	22	34
3:00	26	36
4:00	24	39
5:00	21	30
6:00	13	20
7:00	14	15
8:00	9	14

TIME	East Side	West Side
8:00	49	30
9:00	57	40
10:00	58	42
11:00	58	50
12:00	60	54
1:00	58	48
2:00	55	45
3:00	56	44
4:00	56	48
5:00	41	30
6:00	29	22
7:00	20	18
8:00	16	14

Quarantina St Bt. Haley & Montecito

Haley St Bt. Olive & Quarantina

TIME	East Side	West Side
8:00	29	28
9:00	26	30
10:00	27	34
11:00	27	33
12:00	29	33
1:00	27	32
2:00	26	31
3:00	24	29
4:00	20	30
5:00	13	16
6:00	9	9
7:00	7	6
8:00	6	4

<u>TIME</u>	North Side	South Side
8:00	13	9
9:00	15	11
10:00	17	14
11:00	15	13
12:00	16	15
1:00	14	16
2:00	14	13
3:00	13	11
4:00	11	19
5:00	9	14
6:00	4	6
7:00	4	4
8:00	3	5

Richardson Ave

Bt. Olive & Salsipuedes/Cesar Chavez

Gutierrez St.

Bt. Olive & Quarantina

<u>TIME</u>	North Side	South Side
8:00	27	18
9:00	33	19
10:00	37	21
11:00	32	19
12:00	31	22
1:00	33	20
2:00	32	21
3:00	34	23
4:00	31	20
5:00	27	18
6:00	25	14
7:00	21	11
8:00	14	6

<u>TIME</u>	North Side	South Side
8:00	7	21
9:00	11	25
10:00	13	29
11:00	11	25
12:00	13	26
1:00	12	23
2:00	13	22
3:00	12	22
4:00	12	23
5:00	11	23
6:00	11	15
7:00	10	10
8:00	8	7

Montecito St

Bt. Olive & Quarantina

TIME	North Side	South Side
8:00	25	19
9:00	22	19
10:00	26	23
11:00	30	24
12:00	31	27
1:00	23	24
2:00	24	23
3:00	22	21
4:00	23	22
5:00	23	20
6:00	21	19
7:00	22	19
8:00	15	15

# APPENDIX G PRELIMINARY PROJECT GRADING PHASE

### City of Santa Barbara

Requested Submittal

#### PRELIMINARY PROJECT GRADING PHASE

December 13, 2007

**Project Name:** Los Portales

535 E. Montecito Street Santa Barbara, CA.

Owner: Housing Authority of the City of Santa Barbara

808 Laguna Street.

Santa Barbara, CA. 93101

**Applicant:** Bermant Development Company, Inc.

5383 Hollister Av. Suite 150

Goleta, CA 93117

**Project Architect:** Peikert Group Architects, LLP

10 E. Figueroa Street, Suite 1 Santa Barbara, CA. 93101

**Purpose:** This outline is intended to provide an approximate description, quantity and operation hours of equipment that would generally be used to complete a project of this type.

#### Site Clearing and Grubbing Phase.

- **Duration:** Site clearing and demolition will require approximately two (2) days.
- Equipment & total hours of use:
  - (1) Track dozer time: 2 days.
  - (1) Rubber tire loader time: 24 hours.
  - (2) End-dump trucks time: 16 hours total. (8 truck loads total)
  - (1) Water truck time: 16 hours.

Various small engine hand operated tools: 10 hours.

- Workers: This phase will require approx. five (5) workers including equipment operators, ground laborers and dust and traffic control personnel.
- Export: The estimated clearing and grubbing export is 120 cubic yards of material. Export hauling hours are estimated at eight (8) truck load round trips.

#### Site Excavation and Grading Phase.

- **Duration:** Site grading operations including soil import and pad elevation preparation, approx. four (4) weeks.
- Equipment & total hours of use:
  - (1) Rubber tire loader time: 80 hours.
  - (2) Track dozers time: 300 hours
  - (1) Grader time: 40 hours

- (3) End-dump trucks time: 190 total hours. (Estimated 1,800 cubic yards import, approx 90 trips total)
- (1) Sheep-foot type compactor time: 100 hours.
- (1) Water truck time: 80 hours.
- Small motor driven portable compactors and hand tools.
- Workers: This phase will require approx. six (6) workers including equipment operators and ground laborers.
- Soil Import: The Civil Engineer's estimated project soil import is 1,800 cubic yards. Import hauling equipment hours are included above. Civil Engineer's estimated cut is 260 cubic yards. This material will be stockpiled on site and added to the 1,800 cubic yards imported to accomplish the total estimated 2,060 cubic yards of fill.

<u>Contractor Notes:</u> Actual project scheduling may involve sharing of various equipment types between clearing, excavation and finish grading phases combining use and streamlining project equipment mobilizations.